

VHF PANEL-MOUNT TRANSCEIVERS

Manufacturer	Model	Channels	Power Output (peak W)	Units/Weight (lb.)	Price	Remarks
	TSO	Channel Display	Power Required	Size (in.)		
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KY 97A	760	7 nominal	1/2.9	\$3,476	Active/standby frequency stored channels. LCD 14 V.
	C37c C38c	LCD; nvm	14 VDC	6.25 x 1.3 x 10.5		
	Bendix/King KY 196A	760	16 nominal	1/3.2	\$5,312	Active/standby frequency; stored channels; LED, 28 V.
	C37c C38c	LED	28 VDC	6.3 x 1.35 x 10.8		
	Bendix/King KY 197A	760	10 nominal	1/3.2	\$5,374	LED, NVM
	C37c C38c	LED; nvm	14 VDC	6.3 x 1.35 x 10.8		
	Bendix/King KY 96A	760	7 nominal	1/2.9	\$3,164	Active/standby frequency, stored channels, LED, 28 VDC.
	C37c, C38c	LCD, non-volatile	28 VDC	6.25 x 1.3 x 10.5		
	Bendix/King KY 196B	2280	18 nominal	1/3.2	\$7,246	Active/standby frequency; stored channels; LED 28 VDC.
	C37c C38c	LED; nvm	28 VDC	6.3 x 1.35 x 10.8		

VHF REMOTE-MOUNT TRANSCEIVERS

Manufacturer	Model	Frequency Display	Xmit Power (W)	Units/Weight (lb.)	Price	Remarks
	TSO	Frequency Storage		Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KTR 908	gas discharge	20/NA	2/4.3	\$21,483	Includes KFS 598A control with digital display of active/standby frequencies, flip-flop 118.0-151.975 MHz.
	C37c C38c	2 (9 channels); 118.0 - 151.975 MHz opt.		1.8 x 5.0 x 11.8	28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	VHF-22A	CTL-22G gas discharge 2x5 serial digital tuning	20	2/5.8	\$18,944	Built-in diagnostics; VHF-22B, 118.0-151.975 MHz. Operates in 25 kHz tuning movements; includes CTL-22.
	C37c C38c	8 frequencies; nvm		3/8 ATR-SL	28 VDC	
	VHF-422A	CTL-22G gas discharge	20	2/5.8	\$18,936*	Built-in diagnostics. *BCA estimate.
	C37c C38c	8 frequencies; nvm		3/8 ATR-SL	28 VDC	
	VHF-22C	CTL-22D gas discharge; 2 x 5 serial tuning	20	2/5.8	\$21,864*	Built-in diagnostics; VHF-22D 118.0-151.975 MHz, \$24,036. VHF-22D. 8.33 kHz/25 kHz tuning; includes CTL-22C. *BCA estimate.
	C37c, C38c	8 frequencies; nvm		3/8 ATR-SL	28 VDC	
	VHF-422C	CTL-22D gas discharge	20	2/5.8	\$23,696*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls; VHF-422D, 118.0-151.975 MHz, \$21,756. 8.33/25 kHz tuning; includes CTL-22C. *BCA estimate.
	C37c C38c	8 frequencies; nvm		3/8 ATR-SL	28 VDC	

VHF REMOTE-MOUNT TRANSCEIVERS

Manufacturer	Model	Frequency Display	Xmit Power (W)	Units/Weight (lb.)	Price	Remarks
	TSO	Frequency Storage		Size or Form Factor	Power Required	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	VHF-4000	CTL-22 gas discharge	20	2/4.7	see remarks	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls. Options: 001 base-line: includes CTL-22.
	C37d C38d	8 frequencies; nvm		2.5 MCU	28 VDC	101 adds 8.33; includes CTL-22C. 201 adds Mode A/2 data; includes CTL-22. 301 adds 8.33 and Mode A/2 data; includes CTL-22C. Prices range from \$13,976 to \$21,892.* *BCA estimate.
	VHF-4000E	CTL-22C gas discharge	20	2/4.7	\$21,892-\$26,264*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls. Options: 101 adds 118.0-151.975 + 8.33; includes CTL-22C. 301 adds
	C37d C38d	8 frequencies; nvm		2.5 MCU	28 VDC	Mode A/2 data; includes CTL-22C. *BCA estimate.
	VHF-422D Transceiver	gas discharge	20	2/5.8	\$30,168*	*BCA estimate.
	C37c C38c	8.33/25 kHz		3/8 ATR-SL	28 VDC	
	VHF-4000 Transceiver	gas discharge	20	24.7	\$68,620	*BCA estimate.
		8.33/25 kHz		2/5 MCU		
	CVC-152	color LCD	N/A	1/0.75	\$4,347*	Gray or black panel. *BCA estimate.
	control display			2.50 x 3.15 x 4.29	5 VDC, 5 VAC or 28 VDC	
Cobham Electronics (formerly Wulfsberg) 6400 Wilkinson Dr. Prescott, AZ 86301 (928) 708-1550 (928) 541-7627 www.wulfsberg.com	CCN-955	see remarks	N/A	1/0.75	\$7,643*	Optional multi-function display; color LCD displays nav and comm data. *BCA estimate.
				2.50 x 3.15 x 4.29	5 VDC, 5 VAC, 28 VDC	
	CVC-151 FliteLine	118-136 MHz 118-11.975 MHz	20	1/3.3	\$14,461*	ARINC 429 bus interface; 8.33 or 25 kHz spacing; FM immunity; auto-tune capability. FMS and radio management interface capability VDL Mode 2 & 3 provisions; color LCD shows nav and comm data. *BCA estimate.
	C169	color LCD		4.10 x 2.40 x 13.33	18 - 33 VDC	

HF TRANSCEIVERS

Manufacturer	Model	Frequency Range	Xmit Power (W)	Units/Weight (lb.)	Price	Remarks
	TSO	Channels		Size or Form Factor	Power Required	
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	HF-1050	2-29.999	200 PEP (SSB)	4/29.9	\$83,302	Delivers 200 W PEP transmitter power and four squelch options. "Once tuned, always tuned" coupler capability provides <20 millisecond response. PS-440 controller provides 99 user-programmable channels, clarifier functional and coupler tune status.
	C31d C32d	280,000		KRX 1053 Receiver/Exciter: 5.56 lb; 10.8 x 3.1 x 5.0 KPA 1052 Power Amplifier: 6.67 lb; 12.7 x 7.2 x 1.8 KAC antenna coupler: 9.87 lb; 13.0 x 4.7 x 9.87	28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	HF 9000 System	2 - 29.9999 SSB/AM AM data	selectable power output 10.50, 175 PEP	3/27.5	\$99,980*	Fiberoptic interface; rapid-tune antenna coupler (40 millisecond computer training); BITE. Includes HF receiver/transmitter antenna coupler and radio-tuning unit. *Special order price and delivery
	C31d C32d	280,000; 99 operator programmable; 176 ITU r/t programmed		controller: 2.625 x 5.75 x 5.85 transceiver: 7.625 x 5.55 x 12.60 antenna coupler: 7.6 x 3.8 x 13.0	28 VDC	

HORIZONTAL SITUATION INDICATORS/COMPASS SYSTEMS

Manufacturer	Model	Gyro	Autopilot Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Slave Rate		Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	KI 825 Color EHSI/MFD	remote	extensive outputs; GPS selected discretes, EHSI-ready discretes	1/3.0	\$17,074	Integrated EHSI, AMLCD; arc mode; 360 mode; course map; interfaces with numerous navigation systems and WX500 Stormscope. Priced for a new installation and a KCM 100.
	C113, C6d, C34e, C36e, C40C, C11a	—		3 ATI	14 - 28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	MCS-65 (compass system)	remote	analog including autopilot outputs; CSDB	3/6.7	\$15,608*	Digital interface with EFIS-84 CSDB. *BCA estimate.
	C6c	2.7°/min.; 7°/sec.		ATI	28 VDC	
Sandel Avionics 2401 Dogwood Way Vista, CA 92081 (877) 726-3357 (760) 727-4900 Fax: (760) 727-4899 www.sandel.com	SN3500 Primary Navigation Display	remote	N/A	1/2.9	\$13,407	3 ATI primary navigation display; sunlight readable LED backlit display with 180-de. viewing angle and over 10,000-hr. MTBF. Combines HSI, RMI, color moving map and other features. Accepts synchro, stepper motor and ARINC 429 gyro inputs. Designed to work with a wide variety of digital and analog NAV, GPS/WAAS, DME, ADF and marker beacon receivers. Compatible with the WX-500 Stormscope. Optional interfaces for traffic, \$980; WSI data-link weather, \$980; high-vibration version, \$16,829. NVIS compatible version, \$20,800.
	C113, C6d, C34e, C35d, C36e, C40e, C41d, C118, C119B	N/A		3 ATI	11-33 VDC; 33 W	
	SN4500 Primary Navigation Display	remote	analog	1/3.5	\$20,950	Sunlight readable LED backlit display with 180-degree viewing angle and over 10,000-hour MTBF. Combines HSI, RMI, color moving map and other features. Accepts synchro, stepper motor and ARINC 429 gyro inputs. Designed to work with a wide variety of digital and analog NAV, GPS/WAAS, DME, ADF and marker beacon receivers. Compatible with the WX-500 Stormscope. TACAN interface available. Optional interfaces for traffic, \$714; WSI datalink weather, \$714; high-vibration version, \$23,800. NVIS compatible version, \$27,050.
	C113, C6d, C34e, C36e, C40e, C41D, C118, C119B	N/A		4 ATI	22-33 VDC; 40 W	

AUTOMATIC DIRECTION FINDERS

Manufacturer	Model	Frequencies	Nav Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Frequency Storage Display		Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KR 87	200-1799 kHz	analog	1/6.7 P/M	\$7,192	Times flight and approaches; slaved indicator and RMIs available as options. Includes KA 44B antenna.
		nvm				
	C41c	gas discharge		6.25 x 1.3 x 11.23	11-33 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	ADF-60A	CTL-62 190-1750 kHz (4-kHz steps)	RMI	2/6.0	\$18,932*	Remote-mount; dual antenna optional. Digital tuning. Includes ANT-60A, CAD-62. *Dual system, \$38,088.
		6 frequencies; nvm				
	C41c	gas discharge, 2 frequencies		% ATR-SL	28 VDC	
	ADF-462	CTL62 190-1799 kHz and 2182 kHz emergency freq.	RMI	3/8.0	\$18,936*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls; digital signal processing; dual antenna optional. Includes ANT-462A.*Dual system, \$38,056 includes two receivers, two controls, one antenna.
		6 frequencies; nvm				
	C41d	gas discharge		% ATR-SL	28 VDC	

AUTOMATIC DIRECTION FINDERS

Manufacturer	Model	Frequencies	Nav Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Frequency Storage		Size or Form Factor	Power Required	
		Display				
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	ADF-4000	190-1799 kHz 2182 kHz emergency freq.	CSDB ARINC 429	3/6.4	\$18,272*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls; digital signal processing; dual antenna optional. Includes ANT-462A. *Dual system, \$36,728.
		6 frequencies; nvm				
	C41d	gas discharge	2 MCU	28 VDC		
Cobham Eeltronics 6400 Wilkinson Dr. Prescott, AZ 86301 (928) 708-1550 (928) 541-7627 www.wulfsbeg.com	DFS-431 TSO C-41C		Arinc 429, analog	5.6 6.7 x 2.85 x 13.8	18-33 VDC \$4,890*	Arinc 429 bus, AFCS interface; steering guidance to/from NDB. Self-diagnostics and auto-calibration.
		190-1860 kHz 2181-2183 kHz				
	AT-434A Antenna		0.60 3.15 x 2.50 x 4.29		5 VDC, 5 VAC or 28 VDC \$6,020*	LCD color display; power; gray or black panel *BCA estimate.

NAVIGATION RECEIVERS (PANEL- AND REMOTE-MOUNT)

Manufacturer	Model	Channel Display	Nav Outputs	Units/Weight (lb)	Price	Remarks
	TSO	Channel Storage	GS/MB	Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KNR 634A	gas discharge	ARINC 429 CDI, HSI, RMI	2/6.5	\$37,734	Synchro-interface KNI 582 RMI optional. Digital display of active/standby frequencies.
	C40a, C36c, C34c, C35d	2 nav; nvm		3.0 x 5.0 x 10.0	28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	VIR-4000	CTL-32 gas discharge	CSDB ARINC 429	2/3.9	see remarks	Special order item and pricing. Combines ADF and VOR/ILS/MKR receivers in a single package. Internal diagnostics capability.
	C34e, C36e, C40c, C35d	6 frequencies; nvm	N/A	2.5 MCU	28 VDC	
	NAV-4500	CTL-32 gas discharge	CSDB ARINC 429	2/4.1	\$23,560*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls; digital signal processing; includes CTL-32 (\$4,904); meets Eurocontrol FM immunity standards only. RTU 4200, \$23,880. *BCA estimate.
	C34e, C36e, C40c, C35d	6 frequencies; nvm	N/A	2.5 MCU	28 VDC	
	VIR 32	CTL-32 gas discharge	SIN/COS serial digital; RMI compatible	2/5.7	\$28,400*	Replaces VIR-30A directly; includes serial digital control; digital signal processing; built-in diagnostics; rotor modulation filter optional (strap). Includes CTL-32. Meets FM immunity requirements. *Other configurations will determine final price.
	C34c, C35d, C36d, C40b	6 frequencies; nvm		¾ ATR-SL	28 VDC, 26 VAC, 400 Hz	
	VIR 432	CTL-32 gas discharge	serial digital	2/5.7	\$31,896*	Built-in diagnostics; compatible only with CSDB or ARINC 429 controls; includes CSDB control, digital signal processing. Includes CTL-32. Meets Eurocontrol FM immunity requirements. *Other configurations will determine final price.
	C34d, C35d, C36d	6 frequencies; nvm		¾ ATR-SL	28 VDC, 26 VAC, 400 Hz	
	NAV-4000	CTL-32 gas discharge	CSDB ARINC 429	2/4.7	\$32,532*	Built-in ADF; built-in diagnostics; compatible only with CSDB or ARINC 429 controls; digital signal processing; meets Eurocontrol FM immunity standards. *Configuration will determine price.
	C34e, C36e, C40c, C35d, C41d	6 frequencies; nvm	N/A	2.5 MCU	28 VDC	

NAVIGATION RECEIVERS (PANEL- AND REMOTE-MOUNT)

Manufacturer	Model	Channel Display	Nav Outputs	Units/Weight (lb)	Price	Remarks
	TSO	Channel Storage	GS/MB	Size or Form Factor	Power Required	
Cobham Electronics 6400 Wilkinson Dr. Prescott, AZ 86301 (928) 708-1550 (928) 541-7627 www.wulfsberg.com	CVN-251	108.0-117.95 MHz	ARINC 429 SIN/COS	1/3.31 4.0 x 2.4 x 13.33	\$23,200*	ARINC 429 bus interface; 160 VOR channels; 40 LOC channels; includes glideslope/marker beacon receivers. FM immunity standard. *BCA estimate.
	C40c, C36e, C34c, C35d	LCD		1/0.75 2.5 x 3.15 x 4.29	18-33 VDC	
	CVC-152 Control Display	108.0-117.95 MHz	ARINC 429 SIN/COS	1/3.31 4.0 x 2.4 x 13.33	\$4,890*	Combines comm and nav tuning; gray or black panel. *BCA estimate.
		LCD		1/0.75 2.5 x 3.15 x 4.29	5 VDC, 5 VAC or 28 VDC	
	CCN-955	108.0-117.95 MHz	ARINC 429 SIN/COS	1/3.31 4.0 x 2.4 x 13.33	\$9,540*	Combines comm and nav tuning. *BCA estimate.
		LCD		1/0.75 2.5 x 3.15 x 4.29	5 VDC, 5 VAC or 28 VDC	

DISTANCE MEASURING EQUIPMENT

Manufacturer	Model	Channel Display	Nav Outputs	Units/Weight (lb.)	Price	Remarks
	TSO		Power Outputs (peak W)	Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KN62A	gas discharge	serial data	1/2.6 P/M	\$8,572	Includes antenna and installation kit; accepts remote channeling. Distance accuracy: ±0.1 nm nominal to 99 nm, ±1.0 nm, 100 to 389 nm.
			100	6.3 x 1.3 x 12.3	11-33 VDC	
	Bendix/King KN63	gas discharge	serial data	2/3.6	\$13,801	Includes KDI 572 indicator, optional slaved indicator. Distance accuracy: ±0.1 nm nominal to 99 nm, ±1.0 nm, 100 to 389 nm.
	C66a		100	6.5 x 1.1 x 11.55	11-33 VDC	
	Bendix/King KDM 706A	gas discharge, slaved indicators	ARINC 429 ARINC 568	2/6.3	\$24,093	Includes KDI 572 indicator; optional slaved indicator; kits/mounts not included.
	C66b		250	3.0 x 5.25 x 12.8	28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	DME-42	gas discharge, serial digital 2 x 5 tuning	ARINC 568 serial digital	2/6.2	\$18,896*	Includes two-digit-code diagnostics; directly replaces DME-40; tracks three channels simultaneously when used with CTL-32 and IND-42A (special order only) (CTL-32 controls nav receiver); digital signal processing; echo monitor. IND-42A indicator included. Displays 0-300 nm; 0-999 knots; 0-120 min. *BCA estimate.
	C66b		300	1/2 ATR-SL	28 VDC	
	DME-442	gas discharge	ARINC 568 serial digital (CSDB) ARINC 429	2/6.2	\$22,156*	Tracks three channels simultaneously when linked to CTL-32, IND-42A; decodes and displays station ident; digital signal processing; echo monitor; built-in diagnostics; includes IND-42A (special order only). *BCA estimate.
	C66b		300	1/2 ATR-SL	28 VDC	
	DME-4000	gas discharge	CSDB ARINC 429	2/4.4	\$20,100*	Tracks three channels simultaneously when linked to CTL-32, IND-42; decodes and displays station ident; digital signal processing; echo monitor; built-in diagnostics; includes IND-42. *BCA estimate.
	C66c		300	2.5 MCU	28 VDC	
Cobham Electronics 6400 Wilkinson Dr. Prescott, AZ 86301 (928) 708-1550 (928) 541-7627 www.wulfsberg.com	CDM-451 FliteLine	LCD	3 ARINC 429 2 ARINC 568 1 40-bit serial	1/3.6	\$24,500*	Three-channel scanning. ARINC 429 interface; nav frequency display in DME hold mode; six-wire analog continuous self-test. SD-442B display, \$7,630. Available with NVG option. *BCA estimate.
	C66c		325	3.87 x 3.27 x 13.33	18-33 VDC	

LONG-RANGE NAV/COMS

Manufacturer	Model	Inputs	Units/Weight (lb.)	Price	Remarks
	System Type	Outputs	Size or Form Factor	Power Required	
	TSO				
Avidyne 55 Old Bedford Rd. Lincoln, MA 01773 (781)402-7400 (800) AVIDYNE Fax: (781) 402-7599 www.avidyne.com	IFD 540	VHF Com; VOR-LOC-ILS; GPS SBAS-WAAS	1/7.2	\$16,995	Designed as a drop-in replacement for the GNS 530 and 530W navigators, but with a larger display and touch-screen interface. 5.7-in. VGA (640 x 480) LED. 16 channel GPS/SBAS receiver with 1,000 user-defined waypoints/99 flightplans. Optional TAWS-B, \$7,995; optional 16 W VHF transceiver, \$4,995.
	GPS receiver with WASS (SBAS) capability, VOR/ILSS/LOC receiver, VHF com	—	1.95 x 6.3 x 1.3	28 VDC 10-watt VHF Com (16-watt option available)	
	C34e, C36e, C40c, C110a, C113, C118, C146c, C147, C151b, C157, C165, C169a				
Esterline CMC Electronics 600 Dr. Frrederik Philips Blvd. Montreal, Quebec Canada H4M 259 (514) 748-3184 Fax: (514) 748-3100 www.cmcelectronics.ca	CAM-5024 GLSSU	ARINC 429 (complies with ARINC 743A)/ ARINC 429	1/5.5	\$20,000	Standalone LPV solution with CMA-5025 control head; no FMS or EFIS modification required.
	GPS receiver with SBAS and LPV	ARINC 429	N/A	28 VDC	
	C145b Beta-3 C146b Delta-4				
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	Laseref V Micro IRS	ARINC 429	2/9.9	\$297,633	All digital; passive cooling; automatic mode control; align-in-motion when supplied with ARINC 743A GPS inputs.
	Laser Gyro IRS	ARINC 429	6.6 x 6.4 x 6.3	28 VDC	
	C4c, C5e, C6d				
	GR-550	ARINC 429	1/6.0	\$46,641	Complies with ARINC 743A; integral satcom filter, 24 channels.
	GPS sensor	ARINC 429 (ARINC 743A)	2.6 x 8.5 x 9.5	28 VDC 115 VAC	
	C-129 B1/C1				
	Laseref IV	ARINC 419/429	2/16.9	\$348,968	All digital; 4 MCU ARINC 704.
	Laser Gyro IRS	ARINC 429/ASCB	4.9 x 7.6 x 13.1	28 VDC or 115 VAC	
	C4c, C5e, C6d				
	Special Missions Laseref V	ARINC 429	2/9.9	\$323,111	
	N/A	ARINC 429	6.6 x 6.4 x 6.3	28 VDC	
	N/A				
ICG (International Communications Group, Inc.) 230 Pickett's Line Newport News, VA 23603 (757) 947-1030 Toll free: (800) 279- 1991 (Fax: (757) 947-1035 www.icg.aero	NxtLink ICS-120A Satcom Terminal	ARINC 429; audio tip/ring; audio 4 wire; RS-232; Discretes: RF, USB; mainenance port; remote SIM and configuration	Single 2 MCU rack/6.3 lb.	\$35,840	Dual-transceiver device that combines a single channel of global voice and 2400 bps data service with a second Short Burst Data (SBD) channel in a single 2MCU LRU. The system provides the flight crew with an exclusive global voice channel and a dedicated data link channel to support ACARS, FANS messaging, ADS-C and CPDLC.
		15.98 x 2.33 x 7.75	28 VDC		
	NxtLink ICS-220A Satcom Terminal	ARINC 429; audio tip/ring; audio 4 wire; RS-232; Discretes: RF, USB; mainenance port; remote SIM and configuration	Single 2 MCU rack/6.3 lb.	\$47,295	Three-transceiver unit combines dual channels of global voice and 2400 bps data service with a third Short Burst Data (SBD) channel in a single 2MCU LRU. The system provides the flight crew with an exclusive global voice channel and a dedicated data link channel to support ACARS, FANS messaging, ADS-C and CPDLC.
		15.98 x 2.33 x 7.75	28 VC		
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	GPS-4000S	ARINC 429 (complies with ARINC 743A)	N/A	\$32,576*	*BCA estimate.
	GPS receiver w SBAS (WAAS) capability	ARINC 429	2 MCU	28 VDC	
	C145A Class Beta-3				

LONG-RANGE NAV/COMS

Manufacturer	Model	Inputs	Units/Weight (lb.)	Price	Remarks
	System Type		Size or Form Factor	Power Required	
	TSO				
TrueNorth Avionics, Inc. 1682 Woodward Dr. Ottawa, Ontario Canada K2C 3R8 (613) 224 3301 Toll free in U.S. & Canada: (877) 610-0110 Fax: (613) 224-0954 www.truenorthavionics.com	Simphone Data Link Unit	ARINC 429	1/1.6 lb.	\$19,900	Features a built-in Iridium satcom transceiver. Compatible with many FMS systems to provide FANS-capable Iridium data link without impacting cabin communications.
	FANS-1/A FANS over Iridium	Iridium	8.5 x 5.0 x 1.85	28 VDC	
	RTCA DO-178B Level D; RTCA DO-262A TSO-C159a (pending)				

TRANSPONDERS

Manufacturer	Model	Modes	Units/Weight (lb.)	Price	Remarks
	TSO	Power Output (W)	Size or Form Factor	Power Required	
ACSS, an L-3 Communications and Thales Company 19810 N. 7th Ave. Phoenix, AZ 85027 (623) 445-7001 www.acss.com	Mode S RCZ-852	TCAS/Mode S/Fit ID control panel; RMU (Primus II radios)	5.0	\$67,867	Elementary and Enhanced Surveillance (ELS/EHS) and DO 260 compliant. Certified on many regional and business jets.
	C112	CTL92A/T/E	3.5 x 4.2 x 14.1	28 VDC	
	Mode S ATDL XS-950	TCAS/Mode S/Fit ID control panel; CTL92A/T/E	1/11.5	\$88,647	DO-260B compliant. Elementary and enhanced surveillance (ELLS/EHS). Certified on many business jet and air transport category aircraft.
	C112		4 MCU	28 VDC	
Avidyne Corp. 55 Old Bedford Rd. Lincoln, MA 01773 (781) 402-7400 (800) AVIDYNE Fax: (781) 402-7599 Info @avidyne.com www.avidyne.com	AXP340	Mode A/C/S with extended squitter; ADS-B OUT	1/2.98	\$5,995	Panel-mounted Class 1 Mode S Level 2 data-link transponder, with support for 1090 MHz Extended Squitter (ES), that meets all the current requirements for Mode S elementary surveillance transponders. Developed as a slide-in replacement for existing KT76A/KT78A transponders, the AXP340 is designed to easily upgrade existing Mode A/C equipment to Mode S, while adding additional functionality like a direct-entry numeric keypad, pressure altitude and GPS Lat/Lon readout, Flight ID entry, one-touch VFR code entry, a stop watch timer/flight timer, and altitude alerter. Supports the latest Version 2 1090 MHz Automatic Dependent Surveillance Broadcast (ADS-B) Extended Squitter (ADS-B out).
	C166b, ETSO C2112b, ETSO C166b	240	6.3 x 1.57 x 9.4	10 -33 VDC	
Garmin International 1200 E. 151st St. Olathe, KS 66062 (800) 800-1020 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	GTX 330	A, C, S	1/3.0	\$4,995	Solid-state Mode-S, keypad entry, remote ident, pressure altitude, density altitude and OAT display, front-panel entry for flight ident, altitude monitor with voice alert, flight timers. TIS compatible in the United States.
	C112 CC166a, Class 2A	250	1.6 x 6.25	11-33 VDC	
	GTX 330D	A, C, S	1/3.0	\$9,995	Diversity Mode-S, solid-state keypad entry, remote ident, front panel entry for flight ident, altitude monitor with voice alert, flight timers. TIS compatible in the United States.
	C112 Class 2A	250	1.6 x 6.25 x 9.75	11-33 VDC	
	GTX 327	A, c	1/3.1	\$2,665	Panel mount Mode-C, solid-state keypad entry; dedicated pushbutton keys for squawk code selection; dedicated VFR squawk key and pilot selectable data field.
	C74c, Class 1A	200	6.25 x 1.65 x 8.73	11-22 VDC	
	GTX 33	A, C	1/2.2	\$2,645	Remote mount, solid-state, remote ident capability, flight timers.
	C74c, Class 1A	200	1.71 x 6.30 x 8.78	11-33 VDC	
	GTX 327	A, C	1/3.1	\$2,665	Panel-mount Mode C, solid-state, keypad entry, dedicated pushbutton keys for squawk code selection, dedicated VFR squawk key and pilot selectable data field.
	C74c, Class 1A	200	6.25. x 1.65 x 8.73	11-22 VDC	

TRANSPONDERS

Manufacturer	Model	Modes	Units/Weight (lb.)	Price	Remarks
	TSO	Power Output (W)	Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. Albuquerque, NM 87113 www.bendixking.com	Bendix/King KT 76A	A, C	1/3.1	\$2,265	Automatic reply-light dimmer; system test; remote ident capability adapter available.
	C47c; Class 1B	250	6.25 x 1.6 x 10.0	14 or 28 VDC	
	Bendix/King KT 76C	A, C	1/3.1	\$3,286	Slide-in replacement for KT 76A. Programmable VFR code; remote ident capability; gas-discharge digital display; pushbutton code entry.
	C47c	250	6.25 x 1.63 x 10.73	11-33 VDC	
	Bendix/King KT 73	A, C, S, TIS	1/3.6	\$6,399	Mode S data link with TIS. Meets European Elementary Surveillance mandate (non-diversity).
	C112	200	6.25 x 1.63 x 10.82	10-32 VDC	
	Bendix/King KT 70	A, C, S	1/3.9	\$6,958	Mode S transponder; non-diversity surveillance only; includes discrete address memory module; displays encoding altimeter output; gas discharge display.
	C112; Class 1A	250	6.25 x 1.63 x 10.0	11-33 VDC	
	Bendix/King MST 67A	A, C, S	2/8.5	\$45,434	Mode S diversity transponder.
	C37c/C38c C74c; Class 3A	250-625	14.0 x 3.0 x 8.9	115 VAC; 400 Hz	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	TDR-94D	S	2/9.7	\$335,068*	Mode S transponder; European Elementary and Enhanced Surveillance compliant. Compatible with TCAS II Change 6.04 and Change 7.0 systems. DO-260A ADS-B transmit compliant. Includes CTL-92E flight ID capable control panel. *BCA estimate.
	C112; Class 3	250-625	4.9 x 3.3 x 12.5	28 VDC	

WEATHER RADAR

Manufacturer	Model	Ranges	Dish Size & Beam Width (in./deg.)	Scan	Stablztn.	Display Interface	Scope (dia./in.)	Units/ Weight	Price	Remarks
	TSO			Pulse Width	Stabl. Sig.					
	Circuits	Power Output (Peak KW)		Looks/Min.	Ant. Tilt	Colors	Indicator Size	RT. Size	Power	
Garmin International 1200 E. 151st St. Olathe, KS 66062 (800) 800-1020 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	GWX 68	Selectable 2.5, 5, 10, 20, 40, 80, 160 and 320 nm (MX 20; GMX 200)	10/9 12/7.8	20, 40, 60 or 90° (G1000)	±30°	Garmin HSDB and ARINC 429/ 453	N/A	12 in./ 9.1	\$21,995 (12 in.)	Vertical scan feature: looks horizontally or vertically on bearing line selected by pilot. WATCH feature identifies the shadowing effects of short range cell activity; Automatic Target Alert feature looks ahead for intense cell activity in 80-320 nm range.
	C63c	20 or 90° (MX 20 and GMX 200)		30-220 mV/ degree ARINC 429 HSDB	10 in./ 9.0			\$20,995 (10 in.)		
	Vertical scan, ext. STC, WX alert, atten. comp., variable gain - WX and map modes, WATCH	7kW		1 & 4 micro-seconds	±15°	4	6 in. & 10 in. diag.	Width: 10.0 in. Depth: 6.3 in.	4/28 VDC, 60 W 8-28 VAC 400 Hz	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. NE Albuquerque, NM 87113 www.bendixking.com	Bendix/King ART 2000	10, 20, 40, 80, 160	10/10 12/8 15	90° or 100°	30°	KMD 850 EFIS	N/A	1/9.9	\$18,228	Vertical profile feature: scans horizontally or vertically on track line selected by pilot. Alpha-numeric display of range, function and tilt angle.
	C63c			4	20-220 mv/det.			4	N/A	
	Vertical profile, ext. STC, tgt., wx alert, atten., comp., variable gain-map mode	4		ARINC 429	±15°					
	Bendix/King RDR 2100	5, 10, 20, 40, 80, 160, 240, 320	12/8 10/10	90°, 100°, 120°	±30° pitch & roll	KMD 850 EFIS	N/A	1/9.9	\$20,552	Vertical profile feature: scans horizontally or vertically on track line selected by pilot; Alpha-numeric display of range, function and tilt angle. KMD 850 MFD, \$13,440.
	C63c			range dependent	20/220 mv/deg. ARINC 429			5	N/A	
	Vertical profile; extended STC; wx attenuation compensation; variable gain in map mode; wx alert; autotilt	6.0		15	±15°					
	Primus 660	2.5, 5, 10, 25, 50, 100, 200, 300	12/7.9 18/5.6	60° or 120°	±30°	ARINC 453/708 checklist, data nav, EFIS, MFD, LSZ-860	4	2/15.8	\$81,690	Single receiver/transmitter/antenna pedestal.
	C83c			2	50 or 200 mv/deg. or ARINC 429			4	4.81 x 6.25 x 12.24	
	REACT; GMAP target alert, preset & variable gain	10		12/24	±15°					
	Primus 880	2.5, 5, 10, 25, 50, 100, 200, 300	12/7.9 18/5.6 24/4	60° or 120°	±30°	ARINC 453/708 checklist, data nav, EFIS, MFD, LSZ-860	5	2/15.8	\$125,054	Single receiver/transmitter/antenna pedestal.
	C63c			2	50 or 200 mv/deg. or ARINC 429			5	4.8 x 6.25 x 12.24	
	Doppler turb. detec., compensated, tilt, REACT, GMAP target alert, preset & variable gain	10		12/24	±15°					
	Primus 700A	½, 1, 2.5, 5, 10, 25, 50, 100, 200, 300	10/10, 12/7.9, 10 x 14/ 10 x 7.1, 18/5.6, 24/4	60° or 120°	±30	ARINC 429/708 checklist, data nav, EFIS, lightning sensor LSZ-860	5	4/37	\$198,654	Short-range and high resolution system for special search and surveillance missions, displayed menus. Minimum detect range at 450 ft. Allows full dual-mode operation for pilot and copilot. Price reflects typical system.
	C63c			6	50 or 200 mv/deg. or ARINC 429			5	4.81 x 6.25 x 12.24	
	REACT; ground & sea clutter red.; turb. detect-preset & variable gain	10		12/24	±15°					

WEATHER RADAR

Manufacturer	Model	Ranges	Dish Size & Beam Width (in./deg.)	Scan	Stablztn.	Display Interface	Scope (dia./in.)	Units/Weight	Price	Remarks
	TSO			Pulse Width	Stabl. Sig.					
	Circuits	Power Output (Peak KW)		Looks/Min.	Ant. Tilt	Colors	Indicator Size	RT. Size	Power	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. NE Albuquerque, NM 87113 www.bendixking.com	Primus 701A	½, 1, 2.5, 5, 10, 25, 50, 100, 200, 300	10/10, 12/7.9, 10 x 14/10 x 7.1, 18/5.6, 24/4	60° or 120°	±30°	ARINC 429/709 checklist, data nav, EFIS, lightning sensor	5	4/39	\$207,064	Short-range and high-resolution system for special search and surveillance missions; displayed menus and AC 90-80A specified clear zones. Allows full dual-mode operation for pilot and copilot. Price reflects typical system.
	C63c, C102			6	50 or 200 mv/deg. or ARINC 429					
	REACT; ground clutter reduction; turbulence detect-preset & variable gain	10		12/24	±15°	6	4.81 x 6.25 x 12.24	5.0 x 7.6 x 15.0	28 VDC; 115 VAC, 400 Hz	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	RTA-4112	5-320 nm	12/8	60°	±15° tilt	ARINC 708A	N/A	1/15.1	\$175,720	
	C63c			3.44-55usec	—					
	—			—	—	4	—	12 in.	80 W avg.	
	RTS-4114	5-320 nm	14/6.7	60°	±15° tilt	ARINC 708A	N/A	1/15.4	\$178,784	
	C63c			3.44-55usec	—					
	—			13	—	4	varies by indicator	14.0	80 W avg.	
	RTS-4118	5-320 nm	18/5.2	60°	±15° tilt	ARINC 708A 950	N/A	1/17.0		
	C63c			3.44-55usec	—					
	—			—	—	4	—	18.0	80 W avg.	

RADAR ALTIMETERS

Manufacturer	Model	Alt. Range	Accuracy	Display	Units/Weight (lb.)	Price	Remarks
	TSO	Pitch/Roll Limits				Power Required	
FreeFlight Systems 3700 Interstate 35 S. Waco, TX 76706 (254) 662-0000 Fax: (254) 662-9450 www.freeflightsystems.com	RA-4000 and RA-4500	-20-2,500 ft.	0 to 100 ft. ±3 ft. 100 to 500 ft. ±3% 500 to 2,000 ft. ±5%	RAD-40 Radar Altimeter display compatible with the RA-4000 and RA-4500	2/2.27	N/A	RA-4000 provides RS 485/422 and RS 232C outputs; RA-4500 provides ARINC 429, RS 485/422 and RS 232 outputs. Two-year warranty. Optional night vision goggle (NVG) compatible display and round faceplate adapter for display. Optional 1/2 ATI (TSO'd) RAD-40 indicator, \$3,055; when purchased with RA-4000, \$11,190. RAD-40/RA 4500 w/installation kit, \$12,699.
	C87	±20°/±30°				28 VDC	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. NE Albuquerque, NM 87113 www.bendixking.com	Bendix/King KRA 405B	-20-2,000 ft.	0-100 ft. 34 ft or 3%, whichever is greater; 500-2,500 ft., ±5%	pointer dial	2/10.7	\$31,562	Compatible with Honeywell Mark VI GPWS/EGPWS continuous DH set; tracking to 2,500 feet; expanded helicopter version available; night-vision goggle version available. Optional built-in tone generator.
	C87	±20°/±25°				28 VDC	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	ALT-1000	0-2,500 ft.	±2 ft or 2%	Analog only outputs*	2/6.8	\$17,988	*Requires separate converter for use with ARINC 429 systems.
	C87	±40°/±50°				28 VDC	
	ALT-4000	0-2,500 ft.	±2 ft or 2%	EFIS (analog version available)	2/6.8	\$30,728	Interfaces to EFIS high-intensity monitor for Cat II/III certification. Includes two ANT-52 antennas.
	C87	±40°/±50°				28 VDC	

THUNDERSTORM DETECTION SYSTEMS

Manufacturer	Model	Search Arc	Information Display	Display Size	Price	Remarks
	TSO	Max Range		Units/Weight	Power Required	
Avidyne Corp. 1944 East Sky Old Bedford Rd. Lincoln, MA 01733 (781) 402-7400 Fax: (781) 402-7599 www.avidyne.com info@avidyne.com	TWX670	N/A	lightning strikes are displayed with range bearing and intensity (color). TWXCell mode highlights the most intense regions of thunderstorm activity, presenting a visually contoured color display with dynamic sectors.	see Avidyne MHD300, EX500 specifications. 7 each RS 323 outputs. Also compatible for monochrome strikes on many legacy RS 232-capable lightning detection system displays.	\$7,995	Third-generation lightning detection system with digital signal processing and noise immunity. Shows lightning from 0 nm - 200 nm including critical 0 nm - 25 nm range for added tactical benefit. Eliminates radial spread associated with older technology systems. Exclusive TWXCell display provides a dynamic map of the lightning discharge rate and density.
	C110	200 nm			16-35 VDC	
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	LSZ-860	60°, 120°, 360°	three unique symbols represent three rates of occurrence for vertical lightning in a specific area	displays on Honeywell EFIS of various sizes	\$36,209	Price shown is for typical system.
	C110	100 nm		2/6.5	28 VDC	
L-3 Avionics Systems 5353 52nd St. S.E. Grand Rapids, MI 45912 (616) 949-6600 Fax: (616) 285-4224 www.L-3avionics.com	WX-500	pilot-selectable 120° & 360°	graphical depiction of real-time lightning information in cell or strike modes	see remarks 2.5	\$7,130*	Remote-mount sensor interfaces with MFDs for graphical depiction of real-time lightning information. Features 360° and 120° views, selectable ranges of 25-200 nm, input for heading stabilization and options for cell or strike mode data selection. Interfaces to MFDs via RS-422. A separate radar graphics computer (Model RGC-350) is needed for display on dedicated radar indicators. *Processor only.
	C110a	200 nm		Processor: 5.6 x 2.2 12.0	11-32 VDC	
	WX-1000+ AN/AMS-2	360°	CRT	3 ATI	\$18,060	Includes WX-1000+ processor and monochrome CRT display. Features include 360° and 120° viewing modes, six programmable checklists, selectable ranges to 200 nm, and can be heading stabilized with gyro input.
	C110A	200 nm		3/10.95	10-32 VDC	
	WX-1000+ AN/AMS-2	360°	CRT	3 ATI	\$18,060	Includes WX-1000+ processor and monochrome CRT display. Features include 360° and 120° viewing modes, six programmable checklists, selectable ranges to 200 nm, and can be heading stabilized with gyro input.
	C110A	200 nm		3/10.95	10-32 VDC	
	WX-1000E (429 EFIS)	360°	—	depends on EFIS system	\$18,200*	Provides output on EFIS display or radar indicator when paired with RGC35C (sold separately); includes three levels of activity, bearing and distance; optional displays for checklists. *Processor only. Price BCA estimate.
	C110a	200 nm		1/6.67	10-32 VDC	
	WX-1000E (429 Navaid)	360°	—	3 ATI	\$23,710	Features Arinc 429 interface to allow simultaneous display of thunderstorm information and course line to waypoints. Presentation of six user-selectable navigation items. Course deviation indicator (CDI) display. Consult manufacturer for approved interfaces.
	C110a	200 nm		2/10.95	10-32 VDC	

BASIC AUTOPILOTS

Manufacturer	Model	Sensor Type	Attitude Modes	Nav Modes	Units/ Weight (lb.)	Price	Remarks
	TSO	Servo Type	Roll Pitch			Power Required	
Cobham (S-TEC) One S-TEC Way Municipal Airport Mineral Wells, TX 76067 (817) 215-7600 Fax: (940) 325-3904 www.s-tec.com	S-TEC System ThirtyALT	accelerometer	none	none	3/4.0	\$7,365	
	C9c	DC electric	altitude hold			14 or 28 VDC	
	S-TEC System Forty	1 rate gyro	command turn	VOR/LOC/BC, GPS tracking	3/9.0	\$8,820	Can be upgraded to System 50 or 60-2.
	C9c	DC electric	none			14 or 28 VDC	
	S-TEC System Twenty	enclosed in rate gyro	command turn	VOR/LOC, GPS tracking	2/7.0	\$8,644	Can be upgraded to System 30.
	C9c	DC electric	none			14 or 28 VDC	
	S-TEC System 60-1	1 rate gyro	hdg. select	VOR/LOC/BC, GPS/Loran capture and tracking	4/12.0	\$10,694	Includes interfaces with all popular HSIs. Variable bank angle with airspeed; automatic three-level radio gain; can upgrade to 60-2.
	C9c	DC electric	none			14 or 28 VDC	
	S-TEC System 60 PSS	no external sensors	none	GS capture and track	4/11.0	\$11,091	Complements existing single roll-axis autopilot; auto/manual, electric trim optional, \$2,195; may be upgraded to 60-2; altitude selector/alerter optional, \$3,670.
	C9c	DC electric	vertical speed hold; altitude hold; GS capture and track			14 or 28 VDC	
	S-TEC System Fifty	1 rate gyro	command turn/hdg. select optional	VOR/LOC/BC, GPS, Loran tracking	5/14.0	\$14,134	Two-axis, roll and pitch autopilot; trim condition indicator std. Manual electric trim optional, \$2,630. Can be upgraded to 60-2.
	C9c	DC electric	altitude hold			14 or 28 VDC	
	S-TEC System Thirty	enclosed in rate gyro plus pitch computer	command turn	VOR/LOC/GPS/Loran tracking	5/13.0	\$13,759	DG option, \$2,495
	C9c	DC electric	altitude hold			14 or 28 VDC	
	S-TEC System 60-2	1 turn coord., 1 dir. gyro	hdg. select	VOR/LOC/BC, Loran track and approach; GS capture and tracking	7/21.0	\$18,919	Interfaces with all popular HSIs. Automatic/manual electric trim optional, \$3,520; altitude/vertical speed selector/alerter optional, \$3,670; can be upgraded to flight director.
	C9c	1 press. transducer	vertical speed and altitude hold			14 or 28 VDC	
	S-TEC System FiftyFiveX	1 turn coord.	hdg. select	VOR/LOC/BC, GPS/Loran tracking and GS capture	5/17.0	\$22,993	Interfaces with all popular HSIs. Automatic/manual electric trim optional, \$3,520. Altitude/vertical speed selector/alerter optional, \$3,670; can be upgraded to flight director.
	C9c	1 press. transducer	digital vertical speed, altitude hold			14 or 28 VDC	
	S-TEC System 65	1 turn coord., 1 dir. gyro	hdg. select	VOR/LOC/BC, GPS/Loran capture and tracking; GS capture and tracking	9/24.0	\$42,887	
	C9c	1 press. transducer	manual and auto. modes			14 or 28 VDC	

INTEGRATED FLIGHT CONTROL SYSTEMS

Manufacturer	Model	Air Data	Autopilot	Power	Weight	Price	Remarks
		Attitude Sensors	Flight Director		AP Only	AP Only	
					IFCS	IFCS	
Cobham (S-TEC) One S-TEC Way Municipal Airport Mineral Wells, TX 76067 (817)215-7600 www.s-tec.com	IntelliFlight DFCS	digital ADAHARS	Magic EFIS NA	14 or 28 VDC	14.5 N/A	see remarks	Dual-side EFIS and 2100 DFCS autopilot, \$146,700.* Single-side EFIS and 2100 DFCS autopilot, \$119,800*. *BCA estimate.
Garmin International 1200 E. 151st St. Olathe, KS 66062 (800) 800-1020 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	GFC 700	GDC 74 (B) DADC	combined	28 VDC	varies by installation	varies by installation	Digital, dual-channel fail-passive system for Cessna Mustang, Caravan, C-172, -182, -206, -350 and -400; Cirrus SR20 and SR22; Diamond DA40; DA42; Embraer Phenom 100 and 300; HBC G36 and G58; Mooney M20R and M20S; Socata TBM 850 and HondaJet.
		GRS 77 AHRS					
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	Primus 1000	micro DADC	IC-600	28 VDC	varies by installation	varies by version	Digital fail-passive system. CAT II-capable; ARINC 429 interfaces, two-, three-, four- or five-tube, 8 in. x 7 in. EFIS. Bombardier Learjet 40, 45 and 45XR; Embraer ERJ-135, 140 and 145; Cessna Bravo, Encore, Excel and Ultra.
	(in remarks)	digital AHRS or IRS	combined		varies by installation	varies by version	
	Primus 1000 CDS	micro DADC	IC-615	28 VDC	varies by installation	varies by installation	Digital fail-passive system. CAT II-capable; ARINC 429 interfaces; two- to five-tube 10 in. x 8 in. LCD EFIS. Cessna Citation XLS.
		digital AHARS	combined		varies by installation	varies by installation	
	Primus 2000	micro DADC	IC-800	28 VDC	varies by installation	varies by version	Digital, dual-channel fail-passive system. CAT II-capable w/optional auto-throttle, dual-sensor monitoring; five- or six-tube 8 in. x 7 in. CRT EFIS. Global Express and Global 5000; Cessna Citation X; Dassault Falcon 900EX/C.
		digital AHRS or IRS	combined		varies by installation	varies by version	
	Primus Epic CDS	micro DADC	FZ-800	28 VDC	varies by installation	varies by installation	Digital fail-passive system. CAT II-capable, ARINC 429 interfaces. Two-, three-, four- or five-tube 10 in. x 8 in. EFIS. SyberJet SJ30-2.
		digital AHRS or IRS	combined		varies by installation	varies by installation	
	Primus Epic	air data module and micro IRS	integrated modular avionics unit	28 VDC	varies by installation	varies by installation	Integrates all traditional avionics into modular avionics unit. Digital, dual-channel; fail operational system. CAT II-capable w/ optional auto-throttle and envelope protection. Includes two- to five-tube 10 in. x 8 in. LCD EFIS or four 13 in. LCDs. Agusta/Bell AB139; Citation Sovereign; Dassault Falcon 900EX, 2000EX and 7X; Embraer 170, 175, 190 and 195; Gulfstream G350, G450, G500 and G550; Hawker 4000.
		air data module and micro IRS			varies by installation	varies by installation	
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 www.rockwellcollins.com	APS 4000	ADC-3000/3010 AHC-3000/4000	integrated	28 VDC	varies by installation	varies by installation	Available only as part of integrated Pro Line 21 system. Built-in diagnostics, dual channel, fail-passive, digital CAT-II certificated autopilot and flight director.
		—	—		varies by installation	see remarks	
	APS-65	AHC-3000	APS-65	28 VDC	varies by installation	varies by installation	Built-in diagnostics; digital Cat II certificated autopilot. Optional EFIS and AHRS. STC kit installer fabricated. Compatible with EFIS-84. *Typical configuration, \$155,976.
		remote vertical gyro or dual AHRS	EFIS-84 (two tube)		50.6	*	
	APS-85	ADS-86	APS-85	28 VDC, 115 VAC, 400 Hz	varies by installation	varies by installation	Available only as full, dual-channel, fail-passive, digital system; digital Cat II autopilot, 4- or 5-tube EFIS optional; ARINC 429 IRS interface available; includes yaw damper; extensive built-in diagnostics. STC kit installer fabricated. Compatible with EFIS-84. *Typical configuration, \$290,388.
		dual AHRS AHC-3000	EFIS-85 (three tube)		varies by installation	*	

COLLISION AVOIDANCE SYSTEMS

Manufacturer	Model	Display Interface Options	Processor Size	Price	Remarks
	TSO		Weight (lb.)		
ACSS an L-3 Communications & Thales Company 19810 N. 7th Ave. Phoenix, AZ 85023 (623) 445-7000 Fax: (623) 445-7001 www.acss.com	TAWS+	MFD, EFIS, weather radar display	2 MCU	\$153,849 (with GPS)	Terrain Advisory Line and Avoid Terrain features. With GPS version alerts based on aircraft climb capability.
	C151B Class A, C129b2		—	\$136,644 (without GPS)	
	TCAS 2000 RT-950/951	MDFD, EFIS, VSI/TCAS display	4 MCU - 14.7 6 MCU - 15.8	\$203,752	Change 7.1 compliant. Standard positions on many regional and business jets. Bombardier, Cessna, Dassault, Embraer, Gulfstream, Hawker Beechcraft. (SFE selectable on all Airbus and Boeing aircraft.)
	C119b		—		
	TCAS 3000SP	MFD, EFIS, weather radar display	4 MCU - 13.85 6 MCU - 16.08	\$223,327	Change 7.1 compliant. Flexible to add certified ADS-B in applications combined with TCAS.
	—		—		
	T²CAS	MFD, EFIS, weather radar display, VSI/TCAS display	6 MCU - 15.8	\$295,401	Combined TCAS and TAWS in one box. Change 7.1 compliant. ADS-B In/Out capable. Certified on Airbus A320 family.
	C119b, C151b Class A, C129b2		—		
Avidyne Corp. 55 Old Bedford Rd. Lincoln, MA 01773 (800) 284-3963 Fax: (614) 885-8307 www.avidyne.com	TAS600	MFD, EFIS, weather displays, GPS map displays	7.25 x 11.67 x 3.10	\$8,495	Detects and interrogates other aircraft transponders within range, displaying the surrounding traffic on a host of compatible display systems and provides audible and visual alerts in the event of a potential traffic conflict. Provides 30-second decision time at a closure rate of up to 1,200 kt. Head-Up Audible Position Alerting verbally indicates the conflicting aircraft's bearing, range and relative altitude for rapid visual acquisition of traffic. Includes Patented directional top and bottom antennas. Recommended for entry-level, single-engine piston aircraft. Features a 7-nm range, 3,500 ft. vertical separation maximum and 18,500-ft. service ceiling.
	C-147		8.71 (includes processor, dual antennas and coupler)		
	TAS605	MFD, EFIS, weather displays, GPS map displays	7.25 x 11.67 x 3.10	\$10,495	Recommended for mid-performance aircraft and helicopters. Features 13-nm range, 5,500-ft. vertical separation maximum and a 55,000-ft. service ceiling. It accepts ARINC 429 heading input, permitting rapid repositioning of targets during high-rate turns.
	C-147		8.71 (includes processor, dual antennas and coupler)		
	TAS615	MFD, EFIS, weather displays, GPS map displays	7.25 x 11.67 x 3.10	\$8,495	Recommended for high-performance aircraft and helicopters, the TAS615 features 17-m range, 10,000-ft. vertical separation maximum and 55,000-ft. service ceiling. It accepts ARINC 429 heading, permitting rapid repositions of targets during high-rate turns.
	C-147		8.71 (includes processor, dual antennas and coupler)		
	TAS620	MFD, EFIS, weather displays, GPS map displays	7.25 x 11.67 x 3.10	\$20,990	Features 21-nm range, a 10,000-ft. vertical separation maximum and a 55,000-ft. service ceiling. Accepts ARINC 429 heading input, permitting rapid repositioning of targets during high-rate turns.
	C-147		8.71 (includes processor, dual antennas and coupler)		

COLLISION AVOIDANCE SYSTEMS

Manufacturer	Model	Display Interface Options	Processor Size	Price	Remarks
	TSO		Weight (lb.)		
Garmin 1200 E. 151st. St. Olathe, KS 66062 (800)800-1020 (800)357-8200 Fax: (913) 397-8282 www.garmin.com	HTAWS	GNS 530 (W) series; SNS 430 (W) series	—	\$9,995	Options feature for GNS 530/430 (W) Flight Management Systems for helicopters. Visual and aural warnings are provided to warn crew of potential CFIT hazards. Reduced Protection Mode (RP M0de) is available. Provides optional voice callouts (VCOs) when descending 500 feet and lower. Option available for remote mountable annunciation.
	C194		—		
	GTS 800	GNS 530 (W), GNS 500 (W), GNA 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	6.25 x 2.7 x 12.7	\$9,995	40-watt TAS suited to most light helicopters and piston aircraft. Features Garmin's exclusive CLEAR CAS technology with up to 12 miles of active surveillance and ADS-B "in" capability.
	C147, C166a, DO-197A, DO-200A		LRU 9.0 vertical rack, 1.05; horizontal rack 1.94		
	TAWS	G1000 G900X GNS 530 (W) GPS 500 (W)	N/A	\$10,000	GNS 500 Series navigation systems. Visual and aural warnings are provided to warn crew of potential CFIT hazards.
	C151a Class B		N/A		
	GTS 820	GNS 530 (W), GNS 500 (W), GNA 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	6.25. x 2.7 x 12.7	\$19,995	TAS traffic alerting for faster and higher-performing aircraft. Combines active/passive surveillance, 250-watt output (for up to 40 mi. of active surveillance), and Garmin CLEAR CAS with ADS-B "in" capability.
	C147, C166a, CO-197A, DO-200A		LRU: 9.0 vertical rack 1.05 horizontal rack 1.94		
	GTS 850	GNS 530 (W), GNS 500 (W), GNA 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	6.25. x 2.7 x 12.7	\$24,995	Satisfies all TCAS I collision avoidance criteria for higher-capacity turboprops and jets. Garmin CLEAR CAS enables both active and passive surveillance with 1090 MHz ADS-B "in" capability; 250 watts output.
	C118, C116a, DO-197A, DO-267A		vertical rack 1.05 horizontal rack 1.94		
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. NE Albuquerque, NM 87113 www.bendixking.com	Bendix/King KGP 560	KMD 550 MFD, KMD 850 MFD and most MFDs	2.2 x 4.15 x 6.25	\$12,865	EGPWS exceeds Class B requirements. Provides aural and visual warnings; Internal GPS; worldwide database by region.
	C151 Class B		1.5		
	KGP 860	KMD 550 MFD, KMD 850 MFD and most MFDs	2.2 x 4.15 x 6.25	\$15,615	EGPWS exceeds Class B requirements. Provides aural and visual warnings; internal GPS; worldwide database by region. EFIS displays additional warning modes.
	C151 Class B		1.5		
	Mark XXI	KMD 550 MFD, KMD 850 MFD and most MFDs	4.5 x 7.0 x N/A	\$19,011	Helicopter EGPWS.
	C118 Class B		1.5		
	Bendix/King KTA 870	KMD 550 MFD, KMD 850 MFD and most MFDs	4.5 x 7.0 x 13.8	\$27,982	Traffic Advisory System (TAS) is an active system providing aural and visual advisories. Single or dual directional antennas.
	C147		8.75		
	KTA 970	dual-color, flat-panel LCD combined IVSI/TA display, KMD 550, EFIS, KMD 850 or weather radar	4.5 x 7.0 x 13.8	\$36,767	TCAS I system.
	C118		8.75		
	Bendix/King KMH 880	KMD 550 MFD, KMD 850 MFD and most MFDs	4.5 x 7.0 x 13.8	\$43,730	Traffic Advisory System (TAS) and EGPWS in one box. Active traffic system providing aural and visual advisories. Single or dual directional antennas.
	C147, C151, Class B		8.75		
	Bendix/King KMH 980	KMD 550 MFD, KMD 850 MFD and most MFDs	4.5 x 7.0 x 13.8	\$56,723	TCAS I and GA-EGPWS.
	C118, C151 Class B		9.68		

COLLISION AVOIDANCE SYSTEMS

Manufacturer	Model	Display Interface Options	Processor Size	Price	Remarks
	TSO		Weight (lb)		
L-3 Avionics Systems 5353 52nd St. S.W. Grand Rapids, MI 49512 (616) 949-6600 Fax: (616) 285-4224 www.L-3avionics.com	LandMark TAWS 8000	TAWS compatible Arinc 453 EFIS, Arinc 453 weather radar indicators and compatible MFDs. Display on non-Arinc 453 radar indicators requires the RGC 350 Radar Graphics Computer (sold separately)	7.0 x 2.25 x 9.0	\$12,230	Remote processor that offers predictive warning functions using position data from a GPS receiver, flight configuration and an internal terrain and obstacle database. Both aural and visual warnings are issued whenever CFIT situations arise. LandMark is designed to meet or exceed Class B requirements of TSO C151a. Baro-corrected altitude input required.
	C151a Class B		3.35		
	LandMark TAWS 8100	TAWS compatible Arinc 453 EFIS, Arinc 453 weather radar indicators and compatible MFDs. Display on non-Arinc 453 radar indicators requires the RGC 350 Radar Graphics Computer (sold separately)	7.0 x 2.25 x 9.0	\$15,230	Features a WAAS GPS Sensor. With its accurate positioning information, the LandMark 8100 eliminates the need for multiple inputs from other aircraft sensors, simplifying the installation. The 8100 provides the highest integrity terrain data without complicated GPS, ADC or OAT inputs. 320 nm range.
	C151b Class B		3.40		
	SkyWatch SKY497	Displays on compatible EFIS and MFDs. Contact factory for list.	12.52 x 3.56 x 7.62	\$15,990	(TAS) Active surveillance 11 nm, tracks up to 30 intruder aircraft and provides both aural and visual warnings. Verbal Intruder Positioning (VIP) announces range, bearing and relative altitude or intruder aircraft through cockpit's audio system. Single antenna system reduces installation costs and exceeds the performance of dual antenna systems. 5-yr. warranty.
	C147		LRU: 8.9 Antenna: 2.3		
	SkyWatch HP SKY899	Displays on compatible EFIS and MFDs. Contact factory for list.	12.52 x 3.56 x 7.62	\$20,990	(TCAS-I) Active surveillance 35 nm, tracks up to 35 intruder aircraft and provides both aural and visual warnings. Verbal Intruder Positioning (VIP) announces range, bearing and relative altitude or intruder aircraft through cockpit's audio system. Single antenna system reduces installation costs and exceeds the performance of dual antenna systems. 5-yr. warranty.
	C147		LRU: 9.0 Antenna: 2.3		
	SkyWatch HP SKY899	Displays on compatible EFIS and MFDs. Contact factory for list.	12.52 x 3.56 x 7.62	\$24,340	(TCAS-I) Active surveillance 35 nm, tracks up to 35 intruder aircraft and provides both aural and visual warnings. Verbal Intruder Positioning (VIP) announces range, bearing and relative altitude or intruder aircraft through cockpit's audio system. Single antenna system reduces installation costs and exceeds the performance of dual antenna systems. 5-yr. warranty.
	C147, C118		LRU: 9.0 Antenna: 2.3		

COLLISION AVOIDANCE SYSTEMS

Manufacturer	Model	Display Interface Options	Processor Size	Price	Remarks
	TSO		Weight (lb)		
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	EGPWS MK VI	EFIS (select), MFD and radar indicators	6.2 x 3.0 x 12.1	\$46,611	MK VI designed for 10- to 19-passenger turboprop operation, interface and display requirements.
	C151b Class A, C92C		3.5		
	EGPWS MK VIII	EFIS (select), MFD and radar indicators	6.2 x 3.0 x 12.1	\$56,054	MK VIII designed for >30-passenger light transport operations, small turbofan, business jets. No internal GPS
	C151b Class A, C92C		3.5		
	EGPWS MK XXII	EFIS and MFDs	6.2 x 3.0 x 12.1	\$61,513	MK XXII is for helicopters with radar altimeters. Low-altitude mode. Internal GPS.
	C151b Class A		3.5		
	EGPWS MK V	EFIS, MFD and radar indicators	7.9 x 2.4 x 12.8	\$115,854 (without internal GPS)	MK V is standard equipment on turbofan aircraft with digital avionics.
	C151b Class A, C92c, C117a		7.5		
	EGPWS MK VII	EFIS, MFD and radar indicators	7.9 x 2.4 x 12.8	\$116,222	MK VII is for turbofan aircraft equipped with analog avionics.
	C151a Class A, C92c, C117a		8.0		
	CAS 66A System	dual-color, flat-panel LCD combined IVSI/TA display, KTA 870, KMH 880, EFIS or weather radar	½ ATR-S (4 MCU)	\$136,934	TCAS I system. Includes processor, control panel, directional antenna and IVSI/TA display. Does not include installation kits. Upgradable to TCAS II.
	C118		17.0		
	CAS 67A System	dual-color, flat-panel LCD combined IVSI/TA/RA display (included in price shown). Also can interface with KMD 550 MFD, KMD 850 MFD, EFIS or weather radar	1/2 ATR-S (4 MCU)	\$269,211	TCAS II system includes one TTR-4000 TCAS II LRU, one TRE-920 directional antenna, one TVI-920 VSI (TA/RA) display and one CTL-92T TCAS control panel. Does not include: Mode S transponder(s), installation kits/trays or bottom omni-directional TCAS antenna. Software upgradeable to Change 7.1.
	C119 a/b				
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-1000 Fax: (319) 295-2297 www.rockwellcollins.com	TCAS 4000	Collins EFIS, MFD TCAS compatible VSI (RA) Collins TVI-920 (RA, TA)	4 MCU	\$422,064* (typical installation)	TCAS II system. European ACAS compatible Mode S Level III. AC/DC in one part number includes control panel and two TRE antennas. Displays range/alt. separation from traffic. Max range 3 mi. Two surveillance volumes and MSL of traffic. Top/bottom antennas to optimize coverage. Upgrades to 8800 Gold. *BCA estimate.
	C119 (C119a when issued)		17.0		
Sandel Avionics 2401 Dogwood Way Vista, CA 92081 (877) 726-3357 ((760) 727-4900 Fax: (760) 727-4899 www.sandel.com	ST3400H HelTAWS	Integrated rear projection LCD with LED backlighting	3 ATI panel-mount	\$18,950	3-ATI helicopter TAWS with integrated display. Can replace existing radar altimeter indicator. Sunlight readable LED backlit display with 180 deg. viewing angle and over 10,000-hr. MTBF. NVIS compatible version \$22,200.
	C87, C113, C151b, C194		2.9		
	ST3400 TAWS	Integrated rear projection LCD with LED backlighting	3 ATI panel-mount	\$22,750	3-ATI Class A or Class B TAWS with integrated display. Sunlight readable LED backlit display with 180 deg. viewing angle and over 10,000 hr. MTBF. Optional interface for traffic, \$980. Class A version, \$37,100.
	C113, C151b		2.9		
Universal Avionics Systems Corp. 3260 E. Universal Way Tucson, AZ 85756 (520) 295-2300 (800) 321-5253 Fax: (520) 295-2395 www.uasc.com	TAWS A TAWS B	Universal Avionics EFI-890R, MFD-640, UNS FMS (5-in. display)	2 MCU LRU	TAWS A \$40,700 TAWS B \$26,200	Worldwide terrain database with 480+ MB data. High-resolution analog video views; 3-D perspective view; profile view; map view. Map view of terrain can be output using ARINC 708 or WXP formats for interface with various existing weather radars. Both version include obstacle database.
	C151b, C92c	Honeywell numerous weather radar, MFD and EFIS displays Rockwell Collins numerous weather radar, MFD and EFIS displays Smiths BAE ATP EFIS additional display options available	9.6		

COCKPIT VOICE RECORDERS (CVR)/FLIGHT DATA RECORDERS (FDR)

Manufacturer	Type	Recording Medium	Size	Price	Remarks
	Model	Duration	Weight (lb.)	Power Required	
	TSO				
Honeywell Aerospace 1944 East Sky Harbor Circle Phoenix, AZ 85034 (800) 601-3099 Fax: (602) 365-3343 www.honeywell.com	CVR	solid-state, digital	9.5 x 5.88 x 5.75	\$29,539	Non-ARINC size with underwater locator beacon; control panel and mounting tray not required. ARINC 557 and ARINC 757.
	AR 120 CVR 980-6023-002	120 min.	8.8	28 VDC	
	ED 56A, C123a				
	CVR	solid-state, digital	½ ATR Short	\$41,801	Solid-state CVR with underwater locator beacon. ARINC 557 and ARINC 757.
	SSCVR 980-6022-011	120 min.	11.5	28 VDC 115 AC	
	ED 56A, C123				
	FDR	solid-state, digital	9.5 x 5.88 x 5.75	\$43,471	Non-ARINC FDR, ARINC 717, 429. Mounting tray not required.
	AR FDR 980-4710-00X	25 hrs. @ 64, 128, 256 wps	8.8	28 VDC	
	ED 55, C124e				
	FDR	solid-state, digital	½ ATR Long or Short	\$32,785 to \$45,535	Solid-state FDR; ARINC Form Factor; under- water locator beacon. ARINC 747, 573, 717. Fire test to ED 56a.
	SSFDR 980-4700-0XX	25 hrs. @ 64, 128, 256 wps	11.5 (Short) 13.5 (Long)	115 VAC 28 VDC	
	ED 55, C124				
	DVDR/FDR	solid-state, digital	½ ATR Short	\$59,695	Combination CVR/FDR; ARINC Form Factor. Mounting tray not required. Data download through front access PCMCIA.
	AR Combi 980-6021-06X	120 min. voice; 25 hr. data @ 64, 128, 256 wps	11.5	28 VDC	
	ED 56A, C123a				
L-3 Aviation Recorders 100 Cattlemen Rd. Sarasota, FL 34232 (941) 371-0811 www.L-3ar.com	CVR/FDR	solid-state	1½ ATR Short CVR; 1½ ATR Short or Long FDR CVR/FDR Short: 12.6 x 5.0 x 5.5 FDR Long: 19.6 x 5.0 x 5.5	\$21,030, CVR \$23,705, FDR	Includes underwater locator beacon, mount- ing tray required. ARINC 757 connector CVR, ARINC 747 connector FDR, GMT or FSK time-signaling source for CVR. Separate RIPS module available for CVR, rotor-speed input for CVR for helicopter applications; CPDLC data link recording for CVR; minimum 25-hr. 64 wps up to 1024 wps recording rate for FDR; ramp (portable) and shop (bench) GSE hardware and software diagnostics and read- out tools optional.
	FA2100				
	C123b, C124b, EUROCAE ED-112				
	CVDR	solid-state	½ ATR Short 12.6 x 5.0 x 5.5	\$23,446	Includes underwater locator beacon, mounting tray required. ARINC 757 connector, GMT or FSK time-signaling source for CVR. Separate RIPS module available for CVR, rotor-speed input for CVR for helicopter applications; CPDLC data link recording for CVR, OMS output for CVR, minimum 2-hr. 4-channel high-quality audio recording for CVR, minimum 25-hr., 128 wps up to 1024 wps recording rate for FDR; rap (portable) and shop (bench) GSE hardware and software diagnostics and readout tools available.
	FA2100	2-hr. min. CVR; 25-hr. min. FDR	10.0	115 VAC 400 Hz or 28 VDC	
	C123b, C124b, EUROCAE ED-112				
	CVR/FDR	solid-state	½ ATR Short 12.6 x 4.8 x 6.5	\$37,356	Includes underwater locator beacon, mounting tray required. MIL-C-38999 connector, GMT or FSK time-signaling source for CVR. Separate RIPS module available for CVR, rotor-speed input for CVR for helicopter applications; CPDLC data link recording for CVR, OMS output for CVR, minimum 2-hr. 4-channel high-quality audio recording for CVR, minimum 25-hr., 128 wps up to 1024 wps recording rate for FDR; rap (portable) and shop (bench) GSE hardware and software diagnostics and readout tools available. Ethernet data output.
	CVDR Model FA5000	2-hr. min. CVR; 25-hr. min. FDR	7.9	115 VAC 400 Hz or 28 VDC	
	C123b — CVR C124b — FDR EUROCAE ED-112 — CVR and FDR				
	CVDR/SRIVR	solid-state	6.55 x 5.55 x 3.25	\$24,266	Same as above
	—	2 hr. CVR 25 hr. FDR	6.75	28 VDC	
	C123b, C124b EUROCAE Ed-112				

COCKPIT VOICE RECORDERS (CVR)/FLIGHT DATA RECORDERS (FDR)

Manufacturer	Type	Recording Medium	Size	Price	Remarks
	Model				
	TSO	Duration	Weight (lb.)	Power Required	
L-3 Aviation Recorders 100 Cattlemen Rd. Sarasota, FL 34232 (941) 371-0811 www.L-3ar.com	MADRAS*	solid-state	½ ATR Short 12.6 x 5.0 x 7.6	\$80,913	Includes underwater locator beacon, mounting tray required. ARINC 404 Quad connector, GMT time-signaling source for CVR, rotor-speed input for CVR for helicopters applications; minimum 2-hr. 4-channel recording for CVR; minimum 25-hr., 64 wps up to 512 wps recording rate for FDR. Data acquisition options include analog, discrete, synchro, frequency, ARINC 429 and custom signal inputs tailored to each aircraft model. Ramp (portable) and shop (bench) GSE hardware and software diagnostics and readout tools available. *Modular Airborne Data Recording & Acquisition System.
	FA2300 combi voice, data & data acquisition recorder				
	C123b, C124b, EUROCAE ED-112	2-hr. FDR 25-hr. FDR custom data acquisition inputs	15.0	28 VDC	
	Lightweight Data Recorder	solid-state	8.0 x 3.9 x 4.9	\$13,348	No mounting tray required; 2-hr. 2-channel voice recording; 25-hr. GPS data recording; 5-hr. ARINC 717 data recording; 2-hr. analog video recording at 5 fps. Ethernet data output.
	LDR	2 hr. CVR 25 hr. FDR 2-hr. video	5.0	28 VDC	
	C197, EUROCAE ED-155				
	Micro Quick Access Recorder	Minimum 2 GB compact flash memory	2.7 x 2.2 x 1.8	\$5,513	ARINC 573/717/747 compatible; data rates 64 wps up to 1024 wps; USB or Ethernet data output. Fixed or removable flash card media. Data download software utility optional.
	—			115 VAC	
	—	—	6 oz.	400 Hz or 28 VDC	
Universal Avionics Systems Corp. 3260 E. Universal Way Tucson, AZ 85756 (520) 295-2300 Fax: (520) 295-2395 www.uasc.com	Combi CVR/FDR	solid-state flash memory	6.0 x 4.9 x 8.0	\$19,500	No internal batteries. No periodic maintenance. Four channels of cockpit audio data, UTC from ARINC 429 bus, UTC from a Frequency Shift Keying (FSK) signaling source, Rotor Speed for helicopter application. ARINC 717 Flight Data Recording, analog/digital sensor signals via FDAU, ARINC 758 data link information. PC-based ramp testing/diagnostics.
	CVFDR-145	120-min. voice & ambient audio +25 hr. (min.) Flight data +120 minute data link messaging	7.0	28 VDC	
	C123b, C124b, C177, C123a, C124a, EUROCAE ED-112				
	Combi CVR/FDR w/ embedded Recorded Independent Power Supply (RIPS)	solid-state flash memory	6.0 x 4.9 x 8.0	\$27,500	Embedded RIPS. Solid state memory. No internal batteries. No periodic maintenance. Four channels of cockpit audio data, UTC from ARINC 429 bus, UTC from a Frequency Shift Keying (FSK) signaling source, Rotor Speed for helicopter application. ARINC 717 Flight Data Recording, analog/digital sensor signals via FDAU, ARINC 758 data link information. PC-based ramp testing/diagnostics.
	CVFDR-145R	120-min. voice & ambient audio +25 hr. (min.) Flight data +120 minute data link messaging	8.68	28 VDC	
	C123b, C124b, C155, C177, C123a, C124a, EUROCAE ED-112				
	CVR	solid-state flash memory	6.0 x 4.9 x 8.0	\$16,500	No internal batteries. No periodic maintenance. Four channels of cockpit audio data, UTC from ARINC 429 bus, UTC from a Frequency Shift Keying (FSK) signaling source, rotor speed for helicopter applications, ARINC 758 data link information. PC-based ramp testing/diagnostics.
	CVR-120A				
	C123b, C177, C123a, EUROCAE ED-112	120-min. voice & ambient audio	7.9	28 VDC	
	CVR w/embedded Recorded Independent Power Supply (RIPS)	solid-state flash memory	6.0 x 4.9 x 8.0	\$24,500	Embedded RIPS. Solid-state memory. No internal batteries. No periodic maintenance. Four channels of cockpit audio data, UTC from ARINC 429 bus, UTC from a Frequency Shift Keying (FSK) signaling source, rotor speed for helicopter applications. ARINC 758 data link information. PC-based ramp testing/diagnostics.
	CVR-120R				
	C123b, C155, C177, C123a, EUROCAE ED-112	120 min. voice & ambient audio	8.68	28 VDC	
	FDR	solid-state flash memory	6.0 x 4.9 x 8.0	\$16,500	No internal batteries. No periodic maintenance. ARINC 717 Flight Data Recording. Additional data storage beyond 25 hr., analog/digital sensor signals via FDAU. PC-based ramp testing/diagnostics.
	FDR-25				
	C124b, C124a, EUROCAE ED-112	25 hr. (min) Flight data + 120 min. data link messaging	7.9	28 VDC	

HEAD-UP DISPLAYS

Manufacturer	Model	Inputs & Outputs	Units/Weight (lb.)	Price	Remarks
			Size or Form Factor	Power Required	
Elbit Systems of America-Commercial Aviation Kollsman 220 Daniel Webster Hwy. Merrimack, NH 03054 (603) 889-2500 www.kollsman.com	Advanced Technology HUD (AT-HUD)	ARINC 429, ARINC 615 discretes, Enhanced Vision (EVS) video, Synthetic Vision (SVS) video	33 14.0 x 6.0 x 5.0	\$356,000* 28 VDC	Fully digital EFVS video ready LCD HUD that is compact and lightweight. *Contact manufacturer for specific pricing.
	HGS-4000	ARINC 429, various discretes, enhanced vision, synthetic vision	48.0 - 55.0	\$397,481*	Developed for the Boeing b737, Bombardier CRJ and Q400. *BCA estimate.
			3 LRUs	NA	
	HGS-3500	ARINC 429, various discretes, enhanced vision, synthetic vision	varies by configuration/less than 15 lb. 3 LRUs	Data unavailable	Developed for light to midsize business aircraft applications. Features vary by aircraft, but may include Dual-HUD for pilot/copilot operations; EVS displayed head-up; SVS displayed head-up; Cat III landing capability; low-visibility takeoff capability; lower Cat I minima RVR 1,500 ft. (450 meters); constant view of aircraft flight path and energy state; precise speed and acceleration control; unusual attitude recovery display; TCAS resolution advisory display; wind shear recovery display; runway remaining and deceleration cues; military mission-specific symbology available; flare guidance during all approaches.
	HGS-5000	ARINC 429, various discretes, enhanced vision, synthetic vision	48.0 - 53.0 3 LRUs	Data unavailable	Developed for Embraer jets, Dassault Falcon 7X
	HGS-6000	ARINC 429, various discretes, enhanced vision, synthetic vision	40.0 - 46.0 3 LRUs	Data unavailable	Developed for Gulfstreams, Bombardier Global and Challenger aircraft

AIRCRAFT SITUATION DISPLAYS

Manufacturerz	Model	Display	Inputs	Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Display Size			Size or Form Factor	Power Required	
Aspen Avionics 5001 Indian School Rd. NE Albuquerque, NM 87110 (505) 856-5034 Fax: (505) 314-5440 www.aspenavionics.com	1000 MFD	TFT AMLCD (400 x 760)	ARINC 429 (5) RS-232 (5)	ARINC 429 (1) RS-232 (3)	display: 2.6 lb w/mounting bracket remote sensor: 0.2 lb	\$5,995*	Includes integral ADAHRS backup battery and emergency GPS, integral altitude alterter/preselect, GPS flight plan map views: 360° and arc, slaved directional gyro with heading bug. *BCA estimate.
	C2d, C3d, C4c, C6d, C8d, C10b, C106, C113	6.0-in diag.	Pitot/static quick connect		display: 3.50 x 7.0 x 4.15 depth: 6.35 in. remote sensor: 2.65 x 4.40 x 1.0 in.	14-28 VDC (provided by PDF)	
	1000C3 Pro	TFT AMLCD (400 x 760)	ARINC 429 (5) RS-232 (5)	ARINC 429 (1) RS-232 (3)	display: 2.6 lb w/mounting bracket remote sensor: 0.2 lb	\$9,995*	Same as EFD 1000, plus full EHSI with dual bearing pointers; dual GPS, dual VHF nav support; autopilot and flight director integration; integral GPS steering; base map with curved flight paths; (optional) traffic, weather overlays. EFD PRO HPFD for helicopters, \$14,995. *BCA estimate.
	C2d, C3d, C4c, C6d, C8d, C10b, C106, C113	6.0-in. diag.	Pitot/static quick connect		display: 3.50 x 7.0 x 4.15 depth: 6.35 in. remote sensor: 2.65 x 4.40 x 1.0 in.	14-28 VDC (provided by PDF)	
Avidyne Corp. 55 Old Bedford Rd. Lincoln, MA 01773 (800) 284-3963 Fax: (614) 885-8307 www.avidyne.com	MHD 300	AMLCD	RS-232 ARINC 429	ARINC 429	2.0/0.9 kg	\$7,990* \$10,990 with NVG	Interface applications with Avidyne TAS600-Series, Stormscope WX-500, Honeywell Class B TAWS (EGPWS), TCAS I, NVG compatible, DME. *BCA estimate.
	C147, C118	3 ATI	ARINC 568 (DME)		3.26 x 3.26 x 8.5	10-30 VDC	
Cobham (Chelton Flight Systems) 1111 West Jefferson Ste. 500 Boise, ID 83702 (208) 389-9959 www.cheltonflight systems.com	EFIS	LCD	ARINC 429, Stormscope WX-500, TCAS, TCAD, ARINC, RMI, ADF, FMS, OAT, VS, GS deviation, landing gear, DH, GPS, RS-232	display, annunciators and aural warnings	—	\$70,000* one screen including all sensors	TAWS moving map display, WSI wx, terrain with waterways, TCAS I/II, lightning, Jeppesen NavData, FAA NACO obstructions available by subscription. DO-178B 6.0 software TSOed. *BCA estimate.
	C113, C110a, C151b, C92c	6.4-in. diag.			5.5 x 6.25 x 4.5	11-33 VDC	
Garmin 1200 E. 151st St. Olathe, KS 66062 (800)800-1020 (800)357-8200 Fax: (913) 397-8282 www.garmin.com	HTAWS	(display interface options: GNS 530 (W) series; GNS 430 (W) series)	N/A	N/A	see remarks	\$9,995	Options feature for GNS 530/430 (W) Flight Management Systems for helicopters. Visual and aural warnings are provided to warn crew of potential CFIT hazards. Reduced Protection Mode (RP Mode) is available. Additionally provides optional voice callouts (VOCs) when descending 500 feet and lower. Option available for remote mountable annunciator.
	C194					N/A	

AIRCRAFT SITUATION DISPLAYS

Manufacturerz	Model	Display	Inputs	Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Display Size			Size or Form Factor	Power Required	
Garmin 1200 E. 151st St. Olathe, KS 66062 (800)800-1020 (800)357-8200 Fax: (913) 397-8282 www.garmin.com	GTS 800	(display interface options): GNS 530 (W), GNS 500 (W), GNS 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	—	—	LRU: 9.0 vertical rack 1.05; horizontal rack, 1.9	\$9,995	40-watt TAS, suited to most light helicopters and piston aircraft. Features Garmin's exclusive CLEAR CAS technology with up to 12 miles of active surveillance and ADS-B In capability.
	C147, C166a, DO-197A, DO-200A				(processor size) 6.25 x 2.7 x 12.7	N/A	
	G500	—	RS 232, RS 422, RS 485; ARINC 429, ARINC 708; ethernet, ADF (DC Sine/ Cos)	RS 232, RS 422, RS 485; ARINC 429, HDG/CRS output, CDI/ VDI flags	1/6.4	\$15,995	"Glass cockpit" suite for Class1/Class2 aircraft (under 8,000 lb.). Replaces standard "six-pack" instruments. Features 6.5-in. PFD and MFD, plus AHRS attitude/heading reference and more. Optional Synthetic Vision Technology (SVT). Optional interface adapter.
	C4c, C6d, C8d, C34e, C36e, C40c, C41d, C52b, C63c, C113, C147, C2d	CDU: 10.0 x 6.75 (bezel) x 3.25 (depth)			N/A	N/A	
	GTS 820	(display interface options): GNS 530 (W), GNS 500 (W), GNS 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	N/A	N/A	LRU: 9.0 vertical rack 1.05 horizontal rack 1.94	\$19,995	TAS for faster and higher-performing aircraft. Combines active/passive surveillance, 250-watt output (for up to 40 miles of active surveillance), and Garmin CLEAR CAS with ADS-B In capability.
	C147, C166a, CO-197A, DO-200A				(processor size) 6.25 x 2.7 x 12.7	—	
	G500H	10.0 x 6.75 (bezel) x 3.25 (depth)	RS 232, RS 422, RS 485; ARINC 429, ethernet	RS 232, RS 422, RS 485; ARINC 429,	1/6.4	\$24,995	All-glass avionics system designed specifically for the VFR Part 27 helicopter market. Features includes optional helicopter synthetic vision technology (HSVT), helicopter specific databases with over 7,000 heliports and nearly 30,000 additional low-altitude obstacles, optional XM WX Satellite Weather with NEXRAD, and the ability to display video from a FLIR camera or other video sources. (camera not included.)
	C4c, C6d, C8d, C34e, C36e, C40c, C41d, C52b, C63c, C113, C147, C2d				N/A	10-40 VDC	
	GTS 850	(display interface options): GNS 530 (W), GNS 500 (W), GNS 400 (W), GNS 420 (W), GNS 430 (W), G1000 Series, G900X Series, G600, G500 and select non-Garmin displays	N/A	N/A	LRU: 9.0 vertical rack 1.05 horizontal rack 1.94	\$24,995	Satisfies all TCAS I collision avoidance criteria for high-capability turboprops and jets. Garmin CLEAR CAS enables both active and passive surveillance with 1090 MHz ADS-B "in" capability. 250 watts output.
	C118, C116a, DO-197A, DO-267A				(processor size) 6.25 x 2.7 x 12.7	10-40 VDC	

AIRCRAFT SITUATION DISPLAYS

Manufacturerz	Model	Display	Inputs	Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Display Size			Size or Form Factor	Power Required	
Honeywell Aerospace Bendix/King Avionics 9201 San Mateo Blvd. NE Albuquerque, NM 87113 (855) 250-7027 www.bendixking.com	KDR 610 XM Weather Receiver	see remarks	weather displays via XM satellite	interfaced to Bendix/King KMD 250, KMD 550 and KMD 850 MFDs	1/1.5	\$7,408	Part of an MFD system; data link weather receiver provides high-speed textual and graphical weather to the cockpit. Available weather products include composite NEXRAD radar, graphical METARs, AIRMETS and SIGMETs. The active flight plan can be overlaid on all graphical weather images. System enables user to pan, zoom and interrogate areas of interest via joystick.
	C157	see remarks			see remarks	10-32 VDC	
	Honeywell MFRD	LCD	RS-232 ARINC 429, radar, datalink, EGPWS, traffic, NTSC video	display	1/7.5	\$52,327	Multi-function display of weather radar, traffic, terrain, navigation maps, checklists.
	C63c, C110a, C113, C196	6 in. diag.			6.24 (w) x 4.82 (h) x 8.38 (panel depth)	28 VDC or 115 VAC 400 Hz	
L-3 Avionics Systems 5353 52nd St. S.W. Grand Rapids, MI 49512 (616) 949-6600 Fax: (616) 285-4224 www.L-3avionics.com	Trilogy ESI-1000	AMLCD; optional NVG compatibility	N/A	N/A	1/2.22	\$14,995	Electronic standby instrument designed to level "A" software and hardware compliances, the Trilogy ESI replaces traditional standby instruments and combines attitude, altitude and airspeed information into a compact 3.8-in. diagonal display while maintaining a 3-ATI chassis design. Heading is available when coupled with the optional magnetometer. For fixed-wing and helicopter applications.
	C2d, C3e, C4c, C6e, C10b, C46a, C113, C179	4.0 x 3.0			3-ATI chassis 4.0 x. 3.35 x 7.66	14 - 28 VDC	
	Trilogy ESI-2000	AMLCD; optional NVG compatibility	N/A	N/A	1/2.56	\$15,700	Electronic standby instrument incorporates an internal battery to meet the requirements for independent, dedicated back-up power for aircraft without dual electrical system. The lithium ion battery is integrated into the ESI-2000 hardware with a triple redundant safety design and provides a minimum of 1 hr. and up to 4 hr. of standby power. Heading is available when coupled with the optional magnetometer. For fixed-wing and helicopter applications.
	C2d, C3e, C4c, C6e, C10b, C46a, C113, C179	4.0 x 3.0.			3-ATI chassis 4.0 x. 3.00 x 6.7	14 - 28 VDC	
	GH-3900 ESIS	Active matrix LCD	ARINC 429, RS-232, discrete and analog	ARINC 429, RS-232, discrete and analog	1/ 3.0	\$41,000	Features a lighter and shorter chassis than previous models and allows the installer to define multiple I/O interfaces., SSEC and VMO values. An Aircraft configuration PC Software Tool simplifies the setup of the unit, allowing installers to define and customize the presentation of colors, flight cues and navigation data. Designed for FAR Part 25, Part 23 (Class III & IV). Part 27 and Part 29. Variety of air data and heading input options as well as built-in accelerometers. Classified as Non-ITAR.
	C2d, C3e, C4c, C6e, C8e, C10b, C34e, C35d, C36e, C40c, C46a, C66c, C95a, C106, C113, C115b, C145c	3 ATI			8.33 x 3.19 x 3.19 x	Dual 28 VDC inputs (18 VDC emer- gency power	
	GH-39RSU ESIS	DU-42 Display Active Matrix LCD	DU-42 Display: 3 ARINC 429; 1 USB Serial Bus; 1 RS-232 Ser- ial Bus; 12C Serial Bus; 1 Analog Remote Sen- sor Unit: 7 ARINC 429; 1 RS-232 Serial Bus; 6 Discrete Pneumatic pressure ports	DU-42 Display: 1 ARINC 429 Remote Sen- sor Unit: 3 ARINC 429; 2 Discrete; 2 Analog	DU-42 Display: 1.5 Remote Sensor Unit: 3.0	Call manufacturer	Features a 4.2-in. diagonal high-resolution display (DU-42) and a separate Remote Sensor Unit (RSU). 1.5-in.-deep display allows installation in aircraft with limited space behind the panel. Configurable I/O interfaces and SSEC and VMO values, as well as display parameters. Designed for FAR Part 25 and Part 23 (Class III & IV aircraft, and Part 27 and Part 29 helicopters.
	DU-42 Display: C2d, C3e, C4c, C6e, C8e, C10b, C34e, C35d, C36e, C40c, C46a, C66c, C95a, C106, C113a Remote Sensor Unit: C2d, C3e, C4c, C6e, C8e, C10b, C46a, C95a, C106	1.50 (l) x 5.25 (w) x 3.0 (h) null			—	+28 VDC nominal	

AIRCRAFT SITUATION DISPLAYS

Manufacturerz	Model	Display	Inputs	Outputs	Units/Weight (lb.)	Price	Remarks
	TSO	Display Size			Size or Form Factor	Power Required	
Rogerson-Kratos 403 S. Raymond Pasadena, CA 91109 (626) 449-3090 www.rogersonkratos.com	5 ATI EFIS	AMLCD flat panel	analog synchro (XYZ, Sin/Cos) variable AC/DC discretes & digital ARINC 429, 419, 453, 735, RS-232	analog synchro (XYZ, Sin/Cos) variable AC/DC discretes & digital ARINC 429, 419, 453, 735, RS-232	1/7.75	\$42,000* 28 VDC 44 W max	One, two or four programmable, self-contained flat-panel AMLCD EADI and EHSIs. Radio altimeter functions such as DH, expanded scale for landing helicopter operations, TCAS I and II, and EGPWS display capability, in addition to standard ADI, HSI, bearing pointers, CDI, autopilot annunciation, flight director cross bars or 'V' bars. Upgrade packages available. *BCA estimate.
	C3d, C4c, C5e, C6d, C8d, C9c, C34e, C35d, C36e, C40c, C41d, C52b, C63c, C66c, C67, C87, C92c, C113, C117a, C118, C119b, C129a, C147, C161a	5 ATI or 6.4-in. diagonal			5 ATI or 6.4 dia.		
Sandel Avionics 2401 Dogwood Way Vista, CA 92081 (877) 726-3357 (760) 727-4900 Fax: (760) 727-4899 www.sandel.com	SA4550 Primary Attitude Display	rear projection LCD w/LED backlighting	analog: attitude glideslope, localizer, flight director command inputs, radar altimeter mode annunciators	N/A	1/3.4	\$20,950* 28 VDC 40 W	Designed to upgrade legacy ADIs. Incorporates flight director command bars, glideslope/ localizer deviation scale, fast/ slow indicator and mode annunciations. Selectable single-cue/split-cue display option. Sunlight readable LED backlit display with 180-degree viewing angle and over 10,000-hour MTBF. *High-vibration version, \$23,800. NVIS compatible version, \$27,050
	C113, C3d, C4c, C34e, C36e, C52b	4 ATI			4 ATI		
Universal Avionics Systems Corp. 3260 E. Universal Way Tucson, AZ 85756 (520) 295-2300 Fax: (520) 295-2395 www.uasc.com	EFI-550	AMLCD.; optional NVG compatibility	ARINC 6 - 429/419 1 - 561/568 2 - 453/708A 2 - RS 422 4 - analog 30 - discretes*	ARINC 429/49 (2) RS 422 (2) 6 - analog 8 - discretes	1/7.1	\$14,995 28 VDC	*Depending on configuration.
	C3d, C4e, C5e, C6d, C52b, C105, C113	3.35 x 4.36 5.5-in. dia.			(EFIS-85 std.) 4.8 x 5.18 x 7.90 (from front mount surface)		
	EFI-640	AMLCD	ARINC 6 - 429/419 1 - 561/568 2 - 453/708A 2 - RS 422 4 - analog 30 - discretes*	ARINC 429/49 (2) RS 422 (2) 6 - analog 8 - discretes	1/7.8	\$36,000* 28 VDC	Horizontal viewing angles of +/-60°; electronically adjusted vertical viewing angle; sunlight readability with greater than 10,000/1 dimming range. *Depending on configuration.
	C3d, C4c, C5e, C6d, C52b, C105, C113	3.86 x 5.14 6.4-in. dia.			5 x 6 ATI 5.18 x 6.18 x 7.9 (from front mount surface)		
	EFI-890R	active matrix color LCD 6.3 c 63 (8.0-om. dia.)	Analog: 6 - ARINC 429 5 - CSDB 2 - ARINC708 3 - Manchester bus ports 2 - VGA or 1-RDR-1E/F & 1-VGS, 2 - RS-170 or 2 - NTSC comp. or 18:1 1 - RS-232 (maint.) Digital: 28 GND/OPN discretes 14 - 28 VDC/opn 4 - ARINC 407 with 2 ref. inputs 15 - analog DC	Analog: 2 ARINC 429 2 - CSDB 1 - Manchester bus port Digital: 5 - GND/OPN discretes 3 - 28 VDC/OPN discretes 6 - analog resolvers 2 - DC differential 2 - DC single ended	1/ 12.0 Bezel: 7.84 h x 7.42 w depth: 9.79 (back of bezel to read of connector)	\$60,000* 28 VDC	Horizontal viewing angle +60°/-60°, vertical viewing angle +45°/-10°; resolution: 780 x 780 pixels; 124.5 color groups per inch (CGPI); sunlight readability with greater than 10,000/1 dimming range. *Depending on configuration.

ELECTRONIC FLIGHT BAGS

Manufacturer	Model	Display	Inputs	Outputs	Units/Weight (lb)	Price	Remarks
	Class	Display Size			Size	Power Required	
Advanced Data Research Florida 1765 Star Batt Dr. Rochester Hills, MI 48309 (248) 299-5300, Ext. 235 Fax: (248) 299-5319 www.adrsoft.com	FG 7100 EFB Kit	WXGA transmissive LCD with vertical portrait screen (1280 x 768)	2 USB 2.0, external monitor, PCMCIA card slot, secure Digital (SD) card, modem (RJ-11), ethernet (RJ-45), headphone, mic, docking port	VGA, sound 2 serial (with PCMCIA adapter)	1/2.21	\$3,995	Fujitsu Lifebook P1630 coputer with 1.2 GHz Intel Core 2 Duo VLV processor, 1 GB memory (2 GB) optional, 80 GB hard drive (120 GB and 64 GB solid-state drive optional); integrated 802.11 a/b/g/Draft N and Bluetooth wireless LAN, PCMCIA and SD drives; Windows XP Tablet Edition, DVD + RW drive and cable, AC adapter, FCS software. Optional TSO'd power supply, plus many other options.
	Class II	8.9-in. diagonal			9.3 x 6.6 x 1.5	16 VDC	
Esterline CMC Electronics 600 Dr. Frederik Phillips Blvd. Montreal, Quebec, Canada 4HM259 (514) 748-3184 Fax: (514) 748-3100 www.cmcelectronics.ca	PilotView CMA-1100 (8.4 in.) or CMA-1410 (10.4 in.)	touch-screen XGA AMLCD	ARINC 429 (4) Ethernet USB 2.0 (2) RS 232/422, RS-170/NTSC video discrete I/O (4x1), EDU USB 2.0 (2); PCMCIA wireless 802.11 a/b/g	ARINC 429 (2) Discretes (2) video GPS position	EDU: 3.5 EDU: 4.0 EEMU: 2.0	8.4-in. units: \$25,880 10.4-in. units: \$28,880	Touch-sensitive screen and line select keys with intuitive pilot interface. Applications include: electronic charts (Jeppesen, Lido, EAG, etc.), checklists, performance calculation, e-documents, e-echlog, moving maps and weather. EFB system comprises Electronic Display/Processor Unit (EDU), Enhanced Expansion Module Unit (EEMU).
	Class 2	8.4-in. or 10.4-in. diagonal			EDU: 8.5 x 6.1 x 1.5 EDU: 8.0 x 9.6 x 1.6 EEMU: 1.9 x 6.9 x 5.1	N/A 22-33 VDC or 110/400 Hz	
IMS Flight Deck 16 Technology Dr. Ste. 142 Irvine, CA 92618-2324 (949) 679-9900 www.flightdeck.aero	Sky Tab 2350	LCD	1 USB 2.0 port, 1 PCMCIA port, headphone, microphone, 802.11 wireless, Bluetooth	802.11 wireless, Bluetooth	1/1.9	N/A	Microsoft Windows XP Tablet PC OS, 30 GB standard hard drive, optional 8 GB solid state flash drive. No stylus required. AC/DC adapter.
	Class 1	8.4-in. TFT LCD, nced direct sunlight readable, 800 x 600 dpi resolution			7.9 x 9.6 x 0.8		
Innovative Solutions and Support 720 Pennsylvania Dr Exton, PA 19341 (610) 646-9800 www.innovative-ss.com	Available on IS&S AVIONG, ADVIZ, Vantage, PC-12 FPDS, cockpit and IP and others.	AMLCD	integrated in glass cockpit	integrated in glass cockpit	Remote chart server: 8.0	N/A see remarks	Integrated Class 3 chart server system for all models of IS&S Cockpit Display Systems. Class 3 chart information is certified for paperless cockpit with dual servers, own-ship position on all geo-synchronized charts and taxi ways. System provides both full page and patented ZOOM scrolling for detail. Charts include all RNAV, LPV approaches as well. Fast chart search is provided for all charts on the route including approach, departure, SID/STARS. Moving map cursor inputs allow for graphical selection of airports or nav aids.
		10.4 inch, 15.4 inch			Display 6.0 mounted in panel		
NavAero 9-15 W. Hubbard St. 5th Floor Chicago, IL 60610 (866) 628-2376 Fax: (312) 423-9966 www.navaero.com	t-BagC22 EFB	color TFT LCD resistive touch screen	CPU: 1 USB slot Connectors: 61 pin sealed cradle connector, tPad interface, 3 USB, 1 RS-232 1 LAN	CPU: 1 USB slot Connectors: 61 pin sealed cradle connector, tPad interface, 3 USB, 1 RS-232 1 LAN	1/NA	\$3,495* with 8.4-in. display \$3,995* with 10.4-in. display	*Installation kit extra. Class 2 EFB can be used to store, retrieve, display and use a wide variety of required documents and procedures such as operations specifications, performance data, operations manuals, MELs, control documents and video surveillance. CPU: 1 GHz processor, 40GB hard drive, 512MB memory, Windows XP Professional OS. Removable CPU module computer system contains CPU, power supply and emergency battery backup nickel cadmium power pack. *BCA estimate.
	Class 2	8.4 in. or 10.4 in.			93.8 x 113.8 x 23.8 excluding connectors and mounting hardware	13.8-30 VDC 60 W maximum	
Universal Avionics Systems Corp. 3260 E. Universal Way Tucson, AZ 85756 (520) 295-2300 Fax: (520) 295-2395 www.uasc.com	ASU (Application Server Unit)	UCDT III touch screen terminal display	4 ARINC 429, 8 discrete, 2 NTSC video 1 S video 10/100 base T network capability	1 ARINC 429 4 discrete, 10/100 base T network capability	Remote ASU 1/7.5 2 MCU	\$30,000	Provides supplementary display for viewing electronic charts, checklists and external video sources. As an electronic flight bag (EFB), the ASU supports a terminal area chart database via Jeppesen, Inc. Charts, NOTAMs and airport information downloaded from CD-ROM and stored in flash memory within ASU. Flight plan departure and arrival airport information from FMS prompts displays of departure, arrival and approach charts and airport diagrams. Manual searches accomplished via pull-down menu and touch-screen keyboard. Two user-defined zoom levels. System overlays aircraft position onto approach charts and airport diagrams.
	Class 3	5.1 x 6.75 in. 8.4-in. diag			UCD terminal III 1/2.8 6.52 x 8.43 x 1.13	powered by UCD	

ENHANCED/SYNTHETIC VISION SYSTEMS

Manufacturer	Model	Display	Inputs	Outputs	Units/Weight (lb.)	Remarks
	TSO	Display Size			Size	
Esterline CMC Electronics 600 Dr. Frederik Phillips Blvd. Montreal, Quebec, Canada H4M2S9 (514) 748-3184 Fax: (514) 748-3100 www.cmcelectronics.ca	CMA-2600 SureSight I-series EVS-IR Sensor	HUD/HDD	single, dual-band sensor operating in the short to medium wavelengths, 1-5 microns	2-ANSI/SMPTE 170M ARINC 429 RS 422 descretes	1/LRU 21.0	When used with a HUD as part of a certified EVS, infrared sensor provides situational awareness to pilot for night and low-visibility situations.
	—	dependent on HUD/HDD			NA	
	CMA-2600i SureSight I-Series EVS-IR sensor	HUD/HDD	single, dual-band sensor operating in the short to medium wavelengths, 1-5 microns	2-ANSI/SMPTE 170M ARINC 429 RS 422 descretes	1/LRU 21.0	Infrared sensor provides situation awareness to pilots for night and low-visibility situations.
	—	dependent on HUD/HDD			—	
	CMA-2700 SureSight I-Series EVS-IR sensor	HUD/HDD	single, dual-band sensor operating in the short to medium wavelengths, 1-5 microns	2-ANSI/SMPTE 170M ARINC 429 RS 422 descretes 2 ARINC 818	1/LRU 21.0 —	Infrared sensor provides situation awareness to pilots for night and low-visibility situations.
Elbit Systems of America Commercial Aviation Systems - Kollsman 220 Daniel Webster Hwy. Merrimack, NH 03054 (603) 889-2500 www.kollsman.com	EVS II	HUD/HDD	1-5 micron infrared sensor	RS-170/SMPTE 170M; SMPTE 259; RS 232/RS 422; ARINC 429 descretes	3/22.0	EFVS certified for FAR 91.175 (l) and (m) operational credit. EFVS certified for Part 91, 135 and 121 operations on fixed- and rotary-wing applications. *Contact manufacturer for specific application pricing.
		N/A			1/2 ATR	
	GAVIS	any RS-170/ SMPTE, 170M analog video capable display	8-14 micron infrared sensor	RS-170/SMPTE 170M, analog video	1/3.5	EVS certified for situational awareness in all weather conditions. Certified for fixed- and rotary-wing aircraft. *Contact manufacturer for specific application pricing.
	see remarks	N/A			3.0 x 6.0 x 11.0	
L-3 Avionics Systems 5353 52nd St. S.W. Grand Rapids, MI 49512 (616) 949-6600 Fax: (616) 285-4224 www.L-3avionics.com	IRIS A100	any RS-10 compatible displays	7 -14 micron, uncooled ferroelectric sensor	RS-170, NTSC compatible video or PAL	1/1.7	Uses uncooled BST technology, IRIS provides enhanced visibility of almost any object, day or night, by measuring variations in heat signatures. A real-time, black and white image of people, animals, aircraft and terrain is displayed on any compatible RS-170 cockpit display. *King Air, Bell 206 and Twin Commander STC kits additional. Contact factory for pricing and details.
	see remarks	N/A			5.4 x 5.4 x 3.4	
MAX-VIZ, Inc. 16165 S.W. 72nd Ave. Portland, OR 97224 (503) 968-3036 Fax: (503) 968-7615 www.Max-Viz.com	EVS-1500	HDD/HUD compatible with many MFDs	long-wave infrared solid-state uncooled sensor	RS-170	camera: -2.8 diameter x 6.8 length power module: 3.75 x 5.0 x 2.25 camera: 2 lb. power module: 2.5 lb.	Pilot selectable dual field of view. Optical zoom. Designed for high-performance fixed- and rotary-wing aircraft.
	—	—			3.77 x 8.69 x 2.51/1.2lb.	
	EVS-600	HDD/MFC	long-wave infrared solid-state uncooled sensor	RS-170	3.77 x 8.69 x 2.51/1.2lb.	Long-wave infrared solid-state uncooled sensor. Limited to FL 250 or below.
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FLIGHT MANAGEMENT SYSTEMS

Manufacturer	Model	CDU Type	# Available ARINC 429 (In/Out)	Vertical Nav Modes	Performance Management	Air Data In (# types)	Specific Interfaces ARINC 429 (Out)	Weight (lb.)	Price / Remarks
	TSOs	Display Type	TSO'd Nav Sensors	# Available ARINC 429 Procedure Legs	Remote Radio Tuning			CDU Dimensions	
	RNP Certification				ARINC Radar (In)			Power	
Avidyne 55 Old Bedford Rd. Lincoln, MA 01773 (781) 402-7400 (800) AVIDYNE Fax: (781) 402-7599 www.avidyne.com	FMS900W	see remarks	—	multi-waypoint, advisory	No	4 optional; 2 std.	none none	NA	\$70,000. Inte- grated into Avidyne Entegra Release 9 Flight Deck. Price includes FMS900W, dual IDF5000 displays, dual VHF nav/ com, dual WAAS GPS sensors and ACD215 control panel.
	C146	LCD (optional)		23	Yes			4.6 x 6.25 x 11.0	
	WAAS RNP 0.3, -5, -10 BRNAV		WAAS, VOR, IRS		No			20 - 40 VDC	
Esterline CMC Electronics 600 Dr. Frrederik Philips Blvd. Montreal, Quebec Canada H4M 259 (514) 748-3184 Fax: (514) 748-3100 www.cmcelectronics.ca	CMA-9000	full alpha keyboard	24/8	multi-waypoint, advisory	No	ARINC 575	429 DME std.; 429 VOR std.	8.0	Price varies by installation. Coupled, perfor- mance optimized and advisory VNAV for climb, cruise, descent, approach. Performance table based. FANS-1 capable LPV Ap- proach capable. Optional NVG display.
	C129, C146	AMLCD, color		Coupled	Yes			6.75 x 5.75 x 7.15	
	RNP 0.3, -10, BRNAV, PRNAV		GPS, WAAS, VOR, DME, INS, IRS, TACAN		No			—	
FreeFlight Systems 3700 Interstate 35 S. Waco, TX 76706 (254) 662-0000 Fax: (254-662-9450 www.freeflightsystems.com	2101 Approach Plus	Dzus	4/0	Advisory	No	ARINC 565, ARINC 575; Coarse/ Fine A407 Synchro, ARINC 545, TAS, ARINC 429 ADC, RS-232 ADC	ARINC 429 GPS RS-232	3.65	\$7245. Price includes receiver, data card, instal- lation kit (with an- tena), installation manual and pilot guide. Unit also available with NVG capability.
	—	LED		GPS, WAAS	4			No	
	BRNAV		None					10- 40 VDC	
	2101 I/O Ap- proach Plus	Dzus	4/0	Advisory	No	ARINC 565, ARINC 575; Coarse/ Fine A407 Synchro, ARINC 545, TAS, ARINC 429 ADC, RS-232 ADC	ARINC 429 GPS RS-232	3.65	\$11,500. Price includes receiver, datacard, instal- lation kit (with an- tena), installation manual and pilot guide. Sole means oceanic approval; interfaces with EGPWS.
	—	LED		GPS, WAAS	4			No	
	BRNAV		None					10- 40 VDC	

FLIGHT MANAGEMENT SYSTEMS

Manufacturer	Model	CDU Type	# Available ARINC 429 (In/Out)	Vertical Nav Modes	Performance Management	Air Data In (# types)	Specific Interfaces ARINC 429 (Out)	Weight (lb.)	Price / Remarks	
	TSOs	Display Type	TSO'd Nav Sensors	# Available ARINC 429 Procedure Legs	Remote Radio Tuning			CDU Dimensions		
	RNP Certification				ARINC Radar (In)			Power		
Rockwell Collins 400 Collins Rd. N.E. Cedar Rapids, IA 52498 (319) 295-4085 Fax: (319) 295-2297 www.rockwellcollins.com	FMS 3000/5000	full alpha keyboard	4/3	multi-waypoint	Yes	see remarks	see remarks	8.9	LPV approach capability and RF legs are available on some aircraft types. *FMS I/O provided by four redundant concentrators. Remote computer dimensions 1.7 x 8.84 x 6.06 in.; FMS 5000 requires radio tuning unit; FMS 3000 radio tuning is internal.	
	C129 GPS, C146 WAAS-B1, -C1	color LCD			GPS, WAAS, DME, INC, Loran C			Yes		6.375 x 5.75 x 6.33
			see remarks	20- 40 VDC						
	FMS 4200/5000	full alpha keyboard	4/3	multi-waypoint	Yes	see remarks	see remarks	4	LPV approach capability and RF legs are available on some aircraft types. *FMS I/O provided by four redundant concentrators. See FMS3000 remarks for remote computer; FMS4200 has advisory VNAV but not FMS-to-ILS auto transfer; Coupled VNAV available on FMS6000.	
	C129 GPS, C146 WAAS-B1, -C1	color LCD			GPS, WAAS, DME, INC, Loran C			Yes		6.375 x 5.75 x 6.33
	RNP 0.3, -10 BRNAV		see remarks	20- 40 VDC						
	FMS 6100	full alpha keyboard	4/3	multi-waypoint	Yes	see remarks	see remarks	4	FMS I/O provided by four redundant concentrators. See FMS 3000 remarks for remote computer. WAAS/ SBAS capable.	
	C129 GPS, C146 WAAS-B1, -C1	color LCD			VOR< GPS, WAAS, DME, INS, Loran C			Yes		6.375 x 5.75 x 6.33
	RNP 0.3, -10 BRNAV		see remarks	20- 40 VDC						

FLIGHT MANAGEMENT SYSTEMS

Manufacturer	Model	CDU Type	# Available ARINC 429 (In/Out)	Vertical Nav Modes	Performance Management	Air Data In (# types)	Specific Interfaces ARINC 429 (Out)	Weight (lb.)	Price / Remarks
	TSOs	Display Type	TSO'd Nav Sensors	# Available ARINC 429 Procedure Legs	Remote Radio Tuning			CDU Dimensions	
	RNP Certification				ARINC Radar (In)			Power	
Universal Avionics Systems Corp. 3260 E. Universal Way Tucson, AZ 85756 (520) 295-2300 (800) 321-5253 Fax: (520) 295-2395 www.uasc.com	UNS-1Lw	Full alpha keyboard	8/5	23	opt.	ARINC 575, ARINC 429 ADC std.; ARINC 565, Course/ Fine A407 Snchro, ARINC 545 TAS opt. See remarks	ARINC 429 GPS, S422A CSDB DME, Arinc 429 DME, Bendix 429 VOR, ARINC 429 VOR, ARINC 429 INS	2.9	\$54,500. Air data converter unit available; 3-D coupled approach mode; PC program for remote/oceanic ops.; UniLink text compatible; WAAS/ SBAS capable.
	C129 GPS, C146B Gamma	color LCD	GPS, WAAS, Optional: VOR, DME, INS, IRS, Loran, TACAN	multi-waypoint	opt.	ARINC 575, ARINC 429 ADC std.; ARINC 565, Course/ Fine A407 Snchro, ARINC 545 TAS opt. See remarks	ARINC 429 GPS, S422A CSDB DME, Arinc 429 DME, Bendix 429 VOR, ARINC 429 VOR, ARINC 429 INS	4.5 x 5.75 x 6.33; remote computer: 2 MCU, 7.7 lb.	
	RNP 0.3, -5, -10				std.			20-40 VDC	
	UNS-1Lew	full alpha keyboard	8/5	23	opt.	ARINC 575, ARINC 429 ADC std.; ARINC 565, Course/ Fine A407 Snchro, ARINC 545 TAS opt. See remarks	ARINC 429 GPS, S422A CSDB DME, Arinc 429 DME, Bendix 429 VOR, ARINC 429 VOR, ARINC 429 INS	7.86	\$69,000. 3-D coupled approach mode; PC program for remote/oceanic ops.; UniLink text compatible; WAAS/ SBAS capable.
	C129 GPS, C146B Gamma	color LCD	GPS, WAAS, Optional: VOR, DME, INS, IRS, Loran, TACAN	multi-waypoint	opt.			6.38 x 5.75 x 8.96	
					std.			20-40 VDC	
	UNS-1Espw	full alpha keyboard	8/5	23	opt.	ARINC 575, ARINC 429 ADC std.; ARINC 565, Course/ Fine A407 Snchro, ARINC 545 TAS opt. See remarks	ARINC 429 GPS, S422A CSDB DME, Arinc 429 DME, Bendix 429 VOR, ARINC 429 VOR, ARINC 429 INS	7.25	\$68,000. 3-D coupled approach mode; PC program for remote/oceanic ops.; UniLink text compatible; WAAS/ SBAS capable.
	C129 GPS, C146B	color LCD	GPS, WAAS, Optional: VOR, DME, INS, IRS, Loran, TACAN	multi-waypoint	opt.			6.38 x 5.75 x 7.62	
	RNP 0.3, 5, 10				std.			20-40 VDC	
	UNS-1Fw	full alpha keyboard	8/5	23	opt.	ARINC 575, ARINC 429 ADC std.; ARINC 565, Course/ Fine A407 Snchro, ARINC 545 TAS opt.	ARINC 429 GPS, S422A CSDB DME, Arinc 429 DME, Bendix 429 VOR, ARINC 429 VOR, ARINC 429 INS	4.1	\$81,500. 3-D coupled approach mode; PC program for remote/oceanic ops.; UniLink text compatible; WAAS/ SBAS capable.
	C129 GPS, C146B Gamma	color LCD	GPS, WAAS, Optional: VOR, DME, INS, IRS, Loran, TACAN	multi-waypoint	opt.			6.38 x 7.5 x 3.5; remote computer: 2.0 lb.	
	RNP 0.3, 5, 10				std.			20-40 VDC	

INTEGRATED AVIONICS SYSTEMS

Manufacturer	Model	Inputs	Outputs	CDU Type	Operational Capabilities	Weight (lb.)	Price/Remarks
				Dimensions		Dimensions	
						Power Required	
Avidyne Corp. 55 Old edford Rd. #101 Lincoln, MA 01773 (781) 402-7400 www.avidyne.com	Entegra Release 8	see remarks	see remarks	see remarks	FMS, PFD/ MFD, AP/ IFCS, EFIS, TAWS, RMU, SVS, CAS/ TAWS	18.75	Integrates primary flight information, navigation, terrain, weather, traffic on two or three large-formate displays. Selectable IAS and V-speed ranges to suit aircraft installations. Dual-PFD version features CCS Cross Compare System that monitors cross-side PDF and ADAHARS signals 30 times per second. Works with STEC 55 X autopilot and 3rd party GPS/NAV/ Coms for position information.
						two 10.4 in. diagonal, color active matrix displays	
						28 VDC	
	Entegra Release9	see remarks	see remarks	see remarks	FMS, PFD/ MFD, AP/ IFCS, EFIS, TAWS, RMU, SVS, CAS/ TAWS	18.75	Cirrus Gold starting at \$59,000; Piper Matrix starting at \$72,800. Integrates primart flight information, navigation, weather and traffic on two or three large-format displays. Displays sizes include 8 in., 10 in., 12 in. and 15 in. Modular design includes dual VHF NAV/COM, dual WAASD GPS,dual FMS900w, dual ADAHRS, remote transponder tuning. ACD 215 alpha-numeric FMS keypad with display. Optional SVS and EVS.
						two 10.4 in. diagonal, color active matrix displays	
						28 VDC	
Cobham Commercial Systems Integrated Systems One S-TEC Way Municipal Airport Mineral Well, TX 76067 (817) 215-7600 www.s-tec.com	Chelton Flight Systems EFIS	WX500, ADF, TCASI/II, TCAD, ADS-B, TIS-B, radar altimeter, ARNC 429, RS-232, RS-422, 10 discretes	ARINC 429, RS-232, RS-422, 10 discretes, autopilot	color LCD 6.25 x 5.5 in. NVG compatible	FMS, PDF/ MFD, AP/ IFCS, EFIS, TAWS, SVVS, CAS/TAWS	two screen: 2.0 four screen: 50.0	Two screens: \$95,000; Four screens: \$150,000.
						—	
						10-32 VDC	
Esterline CMC Electronics 600 Dr. Frederik Phillips Blvd. Montreal, Quebec Canada 4HM 2S9 (514) 748 3148 Fax: (514) 748-3100 www.cmcelectronics.ca	SmartDeck	ARINC 429, RS-422, RS-232, RS-485, IEEE-139b, discretes, analog, audio	ARINC 429, RS-422, RS-232, RS-485, IEEE-139b, discretes, analog, audio	AMLCD 12 in.	See remarks	See remarks	Price varies by installation. Integrated primary flight information, digital map, EICAS, synthetic vision, terrain, traffic, weather, autopilot, EVS, vertical profile on 2 or 3 large format displays. Dual ADAHRS; dual WASS GPS with LPV capability; dual 16 watt nav-comm radios with 8.33 kHz. Class B TAWS, JeppView e-charts, Mode S transponder, WSI satellite weather. Single- or dual-pilot installation capability; weight and LRU count varies by installation. Numerous additional features.
						—	
						—	

INTEGRATED AVIONICS SYSTEMS

Manufacturer	Model	Inputs	Outputs	CDU Type	Operational Capabilities	Weight (lb.)	Price/Remarks
				Dimensions		Dimensions	
						Power Required	
Garmin International 1200 E. 151st St. Olathe, KS 66062-3426 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	G1000	TCAS i/II, RS 232, RS-422, RS-485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS-232, RS 422, RS-485; ARINC 429; HSDB, CD/HIS, RMI, air data	10- or 12-in. flat-panel LCDs interchangeable for use as either a PFD or MFD. Optional 15 in. screen available	see remarks	NA	Price varies by installation. An all-glass avionics suite designed for OEM or custom retrofit installation on a wide range of business aircraft. Integrates primary flight information, navigation, communication, weather, terrain and traffic data on two or three large format displays. Tailored to specific OEM requirements. Features include 3-axis, all-digital flight control system; Synthetic Vision Pathway navigation; dual AHRS; dual radio modules with WAAS certified IFR Oceanic-approved GPS, VHF Nav with ILS and VHF Com; dual RVSM-compliant DADC; EICAS; Mode S transponder with TIS; Class B TAWS; Digital weather radar; System also available for King Air 200 and C90.
						NA	
						NA	
	G2000	TCAS I/II, RS-232, RS-422, RS -485; ARINC 429; HSDB, CD/HIS, RMI, air data	TCAS I/II, RS- 232, RS-422, RS -485; ARINC 429; HSDB, CD/HIS, RMI, air data	12- or 14-in. backlit LED see remarks	see remarks	NA	Price varies by installation. Integrates primary flight information, navigation, communication, weather, terrain and traffic data on two large format displays. Tailored to specific OEM requirements. Features include three-axis, all-digital automatic flight control system; Synthetic Vision Pathway navigation; dual solid-state AHRS; dual integrated radio modules with WAAS certified IFR Oceanic-approved GPS, VHF Nav with ILS and VHF Com with 16-W transceivers and 8.33-kHz spacing; dual RVSM-compliant DADC; EICAS; Mode S with TIS; Class B TAWS; digital weather radar; Garmin FliteCharts; and Garmin SafeTaxi.
						NA	
						NA	
	G3000	TCAS I/II, RS-232, RS-422, RS- 485; ARINC 429; HSDB, CD/HIS, RMI, air data	TCAS I/II, RS-232, RS-422, RS-485; ARINC 429; HSDB, CD/HIS, RMI, air data	14.1-in. diagonal WXGA see remarks	see remarks	NA	Price varies by installation. Integrates primary flight information, navigation, communication, weather, terrain and traffic data on 3 large format displays. Tailored to specific OEM requirements. Features include three-axis, all-digital automatic flight control system; Synthetic Vision Pathway navigation; dual solid state AHRS; dual integrated radio modules with WAAS certified IFR oceanic-approved GPS, VHF navigation with ILS and VHF communication with 16-watt transceivers and 8.33-kHz channel spacing; dual RVSM-compliant digital air-data computer; EICAS; Mode S transponder with TIS; Class B TAWS; XM Wx and/or digital weather radar; Garmin FliteCharts; and Garmin SafeTaxi.
						NA	
						NA	

INTEGRATED AVIONICS SYSTEMS

Manufacturer	Model	Inputs	Outputs	CDU Type	Operational Capabilities	Weight (lb.)	Price/Remarks
				Dimensions		Dimensions	
						Power Required	
Garmin International 1200 E. 151st St. Olathe, KS 66062-3426 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	G5000	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	four backlit LED XGA 1280 X 800 pixels touch-screen displays	see remarks	NA	Price varies by installation. intended for use aboard a broad range of professionally flown air transport category aircraft, ranging from light jets to large-cabin, transoceanic aircraft. Integrates primary flight information, navigation, communication, weather, terrain and traffic data on 4 large format displays. Features include three-axis, all-digital automatic flight control system; Synthetic Vision Pathway navigation; dual solid state AHRS; dual integrated radio modules with WAAS certified IFR oceanic-approved GPS, VHF navigation with ILS and VHF communication with 16-watt transceivers and 8.33-kHz channel spacing; dual RVSM-compliant digital air-data computer; EICAS; Mode S transponder with TIS; Class B TAWS; XM Wx and/or digital weather radar; Garmin FliteCharts; and Garmin SafeTaxi.
						NA	
				see remarks		NA	
	G500	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	dual 6.5-in. VGA LCDs	see remarks	NA	\$15,995. Includes CDU, digital AHRS, ADC, magnetometer, temperature probe. Also certified to C2d, C10b and C34c. Replaces standard six-pack instruments. Features 6.5-in. PFD and MFD plus AHRS. SVT is standard with G600 and optional for G500. Optional TAWS-B for G600 only. GWX68 radar sold separately. Includes CDU (dual 6.5-in. VGA LCD), digital AHRS, ADC, magnetometer, temperature probe. Optional enhanced autopilot interface capabilities using the optional GAD 43.
				—		NA	
						NA	
	G600	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	dual 6.5-in. VGA LCDs	see remarks	NA	\$29,995. Includes CDU, digital AHRS, ADC, magnetometer, temperature probe. Also certified to C2d, C10b and C34c. Replaces standard six-pack instruments. Features 6.5-in. PFD and MFD plus AHRS. SVT is standard with G600 and optional for G500. Optional TAWS-B for G600 only. GWX68 radar sold separately. Includes CDU (dual 6.5-in. VGA LCD), digital AHRS, ADC, magnetometer, temperature probe. Optional enhanced autopilot interface capabilities using the optional GAD 43.
				—		NA	
						NA	

INTEGRATED AVIONICS SYSTEMS

Manufacturer	Model	Inputs	Outputs	CDU Type	Operational Capabilities	Weight (lb.)	Price/Remarks
				Dimensions		Dimensions Power Required	
Garmin International 1200 E. 151st St. Olathe, KS 66062-3426 (913) 397-8200 Fax: (913) 397-8282 www.garmin.com	GTN 750	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	VGA LCD	GPS/VOR, LOC/GS	9.3	\$16,995
				dual 6.5 in.		NA	
						NA	
	GTN 725	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	Color TFT LCD Touch-screen	GPS/VOR, LOC/GS	9.3	\$15,000
				600 x 267		NA	
	GTN 650	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data		GPS/VOR, LOC/GS	7.0	\$11,495
						NA	
	GTN 635	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data		GPS/VOR, LOC/GS	7.0	\$10,495
						NA	
	GTN 625	TCAS i/II, RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data	RS 232, RS 422, RS 485; ARINC 429; HSDB, CD/HIS, RMI, air data		GPS/VOR, LOC/GS	7.0	\$9,595
						NA	
Innovative Solutions & Support (IS&S) 70 Pennsylvania Dr. Exton, PA 19341 (610) 646-9800 Fax: (610) 646-0149 www.innovative-ss.com	Cessna Citation Adviz Flat Panel Display	ARINC 429, A453/708, Ethernet, Descretes, Analog, Synchro, RS-422, CSDB, USB	ARINC 429, A453/708, Ethernet, Descretes, Analog, Synchro, RS-422, CSDB, USB	AMLCD	see remarks	7.0	Price varies by installation. Designed to replace existing instruments, including the EADI and EHSI displays, altimeter, airspeed and vertical speed indicators. Retrofitting existing aircraft requires minimal changes to existing aircraft wiring while reducing power consumption and weight. Options include satellite weather, e-charts, video and remote radio control.
				10.4 in.		10.0 x 8.35 x 2.51 configuration dependent	
	Eclipse Avionics	ARINC 429, ARINC 453, RS 232, RS 42, Bytefilite, Ethernet, discretes	ARINC 429, ARINC 453, RS 232, RS 42, Bytefilite, USB, Ethernet, discretes	AMLCD	see remarks	PFD: 8.5 MFD: 12.5	Price varies by installation. FMS options include either integrated WAAS-based FMS, exterior WAAS-based FMS or non-WAAS-based FMS; system provides PFD/ND with MFD functions and engine instruments; system interfaces with new or existing AP/FD/IFCS; TAWS display provided and connects directly with TAWS; remote tuned radios optional; e-charts, moving maps, radar display, satellite weather, TCAS-I, fuel management and aircraft systems pages.
				PFD: 10.4 in. (2) MFD: 15.4 in.		PFD: 10.4 in. (2) MFD: 15.4 in. PFD: 50 W MFD: 75 W	
	Pilatus PC-12 FPDS System	contact OEM for details	contact OEM for details	AMLCD	see remarks	15 in. IPFD, 14 lb., 70 W; 10 in. IFPD, 8 lb., 35 W; DCP, 3.0 lb, 8 W	Price varies by installation. FMS options include either WAAS-based FMS, exterior WAAS-based FMS or non-WAAS-based FMS; systems provides PFD/ND with MFD functions; coupled WAAS LPV approach; system interfaces with new or existing AP/FD/IFCS; RVSM certified, options include RS 170 or DVI video input on 5.15-in. IPFD; TAWS terrain display provided and connects directly with TAWS; e-charts certified.
				10.4; 15.0		— —	

INTEGRATED AVIONICS SYSTEMS

Manufacturer	Model	Inputs	Outputs	CDU Type	Operational Capabilities	Weight (lb.)	Price/Remarks
				Dimensions		Dimensions Power Required	
Innovative Solutions & Support (IS&S) 70 Pennsylvania Dr. Exton, PA 19341 (610) 646-9800 Fax: (610) 646-0149 www.innovative-ss.com	Vantage Cockpit/IP Flat Panel Display System	contact OEM for details	contact OEM for details	AMLCD	see remarks	IFPD: 6.0 lb., 30 watts RNCU: 9.75 lbs., 25 watts; ECSU: 25 watts	Price varies by installation. FMS options include either WAAS-based FMS, exterror WAAS-based FMS or non-WAAS-based FMS; systems provides PFD/ND with MFD functions and engine instruments; system interfaces with new or existing AP/FD/IFCS; EVS input can be input from EVS camera or other video camera via RS-170; TAWS terrain display provided and connect directly with TAWS; remote tuned radios optional. e-charts, moving maps (worldwide terrain 3-arc/second, radar display, satellite weather, TCAS-I/II, fuel management exceedance recording and video.
				10.4		—	
Rockwell Collins 400 Collins Rd. NE Cedar Rapids, Iowa 52498 www.rockwellcollins.com	Pro Line Fusion	See Remarks	See Remarks	15.1-in. color LCD SXGA: 14.1-in. color LCD WXGA	FMS, PFD/Adapts to 3, 4 or 5 LCD graphic display configuration integrating PFD/MFD flight information	various, depending on installation	Features include dual comm/nav, single, dual or triple FMS, GPS WAAS, single or dual integrated Flight Information system (IFIS), weather radar with turbulence detection, data link communication, onboard maintenance system, information management system, surface management, surveillance video, enhanced vision, synthetic vision and head-up guidance. Display systems available with touch screen capability. Customized to OEM requirements. Price varies by installation.
	Pro Line 21	Numerous	Numerous	Color LCD 6.375 (h) x 5.75 (w) x 6.33 (l)	FMS, PDF/MFD, EFIS, TAWS, RMU, EVS, SVS pending	Various, depending on installation	Price varies by installation. The typical Pro Line 21 major retrofit package includes three-four 8 x 10 in. LCDs with advanced graphics, all digital CNS radios with dual comm/navs, dual transponders with enhanced surveillance, dual DME, single or dual FMS GPS WAAAS, Digital Flight Control System (DFCS) with coupled VNAV, single or dual Integrated Flight Information Systems (IFIS), dual channel radar altimeter, dual solid-state Attitude Heading Reference Systems (AHRS), dual air data systems (RVSM compliant), solid-state radar with turbulence detection, Engine indications on PFD or MFD, 2nd or 3rd FMS, 3rd FMS, 3rd AHRS, 3rd VHF-4000, 2nd ALT-4000, TCAS 4000, ADS-B transponders, single or dual HF-9000 radio, Satcom, CMU-4000 data link system, XM weather, maintenance diagnostics system, DBU-5000 data loader and all-new wiring and connectors.
Rogerson Kratos 403 S. Raymond Pasadena, CA 91109 (626) 449-3090 Fax: (626) 449-4805 www.rogersonkratos.com	Series 700 Integrated Avionics System for Bell 412 and Bell 429; TC on Bell 429 and STC on Bell 412 using 6 x 8 ALMD displays	ARINC 429, Synchro, Discretes, RGB, NTSC, PAL video capability	ARINC 429, variable DC, Discretes	Course Heading Select Panel (CHSP) 6 x 8 ALMD displays	PFD, MFD, EICAS Mission functions: FLIR, RS-170 video, fuel and hydraulics	Each display unit: 13.5	Prices based on quantity; dependent on engine type.
	Series 600 Integrated Avionics System using 6 x 8 AMLCD displays	ARINC 429, Synchro, Discretes, RGB, NTSC, PAL video capability	ARINC 429, Synchro, Discretes, RGB, NTSC, PAL video capability	Course Heading Select Panel (CHSP) 6 x 8 ALMD displays	PFD, MFD Mission functions: FLIR, RS-170 video, fuel and hydraulics	Each display unit: 13.5	Prices based on quantity.